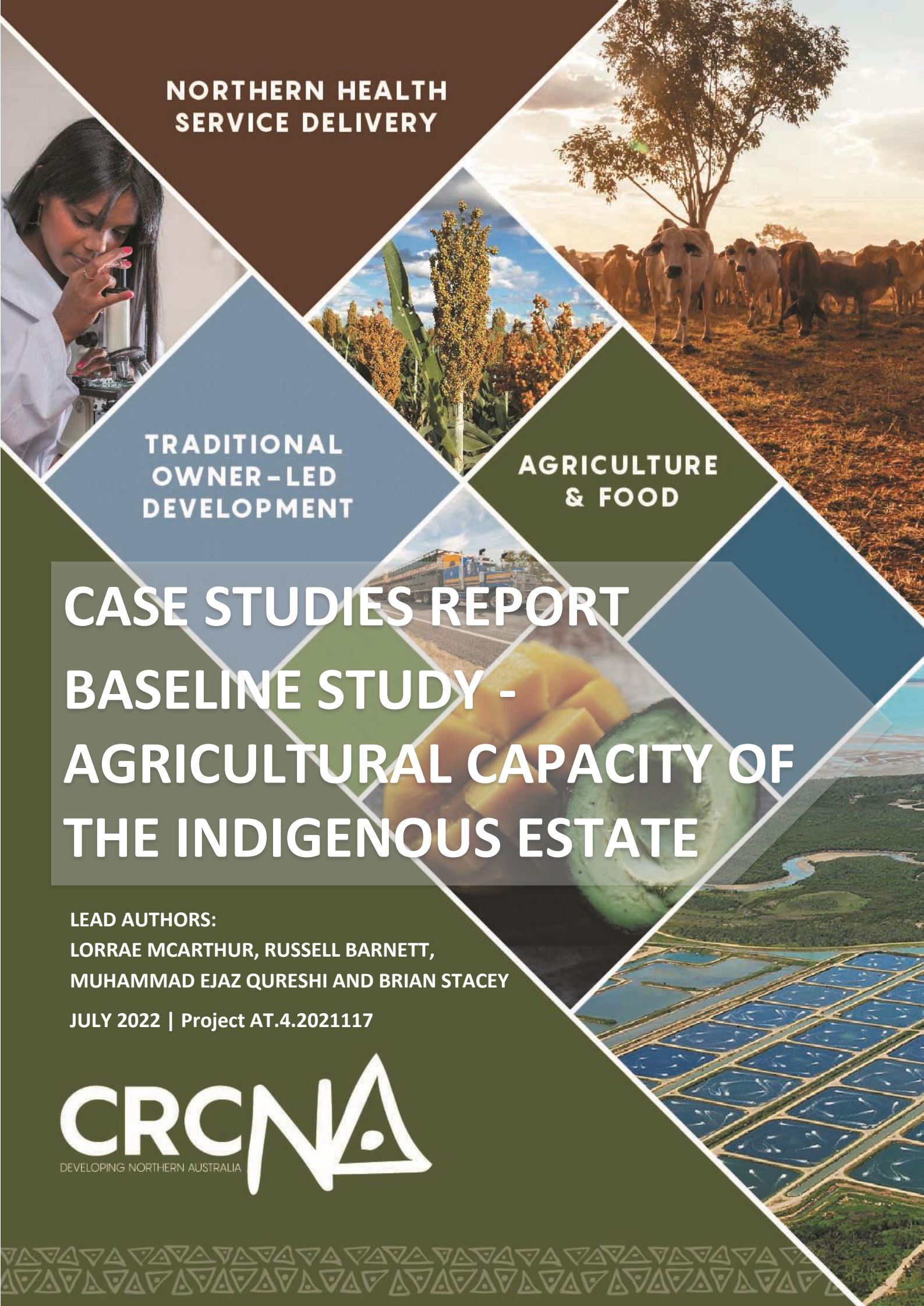

CASE STUDIES REPORT BASELINE STUDY - AGRICULTURAL CAPACITY OF THE INDIGENOUS ESTATE

LEAD AUTHORS:
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JULY 2022 | Project AT.4.2021117

CRCNA
DEVELOPING NORTHERN AUSTRALIA

Australian National University

Australian Government
Indigenous Land and Sea Corporation

The ILSC GROUP

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As the principal investigator for this research, the Australian National University (ANU) pays respect to and acknowledges First Nations people, past, present and emerging leaders, as the Traditional Owners and ongoing custodians of Australia's lands and waters. ANU also acknowledges the invaluable contributions to this research by the principal case study partners, Centrefarm Aboriginal Horticulture Ltd, Alekarenge Horticulture Pty Ltd, Nyamba Buru Yawuru Limited, Morr Morr Pastoral Company, Kuti Co, Beemurra Aboriginal Corporation and the Noongar Land Enterprise Group.

DISCLAIMER

PEER REVIEW STATEMENT

The CRCNA recognises the value of knowledge exchange and the importance of objective peer review. It is committed to encouraging and supporting its research teams in this regard.

The authors confirm that this document has been reviewed and approved by the Project Steering Committee, independent reviewers and program lead acknowledged on the contributors' page.

These reviewers evaluated its:

- originality
- methodology
- rigour
- compliance with ethical guidelines
- conclusions against results
- conformity with the principles of the Australian Code for the Responsible Conduct of Research (NHMRC 2018), and
- provided constructive feedback which was considered and addressed by the author(s).

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Aboriginal and Torres Strait Islanders are advised that this report may contain images of people who have passed away.

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Acronyms

AAC	Arlpwe Aboriginal Corporation
ABA	Aboriginals Benefit Account
ABS	Australian Bureau of Statistics
AED	Western Australia Department of Primary Industries and Regional Development, Aboriginal Economic Development program
AFM	AFM Central Australia Pty Ltd
AHPL	Alekarenge Horticulture Proprietary Limited
ALEDA	Aboriginal Land Economic Development Agency Pty Ltd
ANU	Australian National University
ARAC	Arlpwe Residents Aboriginal Corporation
ATO	Australian Taxation Office
ATSIC	Aboriginal and Torres Strait Islander Commission
Beemurra	Beemurra Aboriginal Corporation
BoM	Bureau of Meteorology
CAPS	Wongutha Christian Aboriginal Parent-Directed School
CATSI Act	*Corporations (Aboriginal and Torres Strait Islander) Act 2006*
Centrefarm	Centrefarm Aboriginal Horticulture Ltd
CLC	Central Land Council
CLCAC	Carpentaria Land Council Aboriginal Corporation
CRCNA	Cooperative Research Centre for Developing Northern Australia
CtG	Partnership Agreement on Closing the Gap 2019 - 2029
DAWE	Commonwealth Department of Agriculture, Water and the Environment
Depot	Roebuck Export Depot
DEEWA	Commonwealth Department of the Environment, Water, Heritage and the Arts
DEH	South Australia Department of Environment and Heritage
DEW	South Australia Department for Environment and Water
DITT	Northern Territory Department of Industry, Tourism and Trade
DoW	Western Australia Department of Water
DPIR	South Australia Department of Primary Industries and Regions
DPIRD	Western Australia Department of Primary Industries and Regional Development

DSA	Data Sharing Agreement
DSF	Desert Springs Farm
EDS	Economic Development Strategy
ESRM Plan	Roebuck Plains Station Ecological Sustainable Rangelands Management Plan
ESU	Yawuru Environmental Services Unit
GDP	Gross Domestic Product
GL	Gigalitres
GPCo	Goolwa Pipi Co
GRP	Gross Regional Product
GSP	Gross State Product
GWEL	Ground Water Extraction Licence
ha	Hectares
IBA	Indigenous Business Australia
ILSC	Indigenous Land and Sea Corporation
ILUA	Indigenous Land Use Agreement
IPA	Indigenous Protected Area
IUCN	International Union for Conservation of Nature
KAC	Kurtijar Aboriginal Corporation
KAPCO	Kimberley Agriculture and Pastoral Company
KLC	Kimberley Land Council
Land Rights Act	*Aboriginal Land Rights (Northern Territory) Act 1976*
ML	Megalitres
MLA	Meat and Livestock Australia
mm	Millimetres
MMPC	Morr Morr Pastoral Company
NAC	Ngarrindjeri Aboriginal Corporation
NBT	Noongar Boodja Trust
NBY	Nyamba Buru Yawuru Limited
Ngopamuldi	Ngopamuldi Aboriginal Corporation
NIAA	Commonwealth's National Indigenous Australians Agency
NLC	Northern Land Council
NLE	Noongar Land Enterprise Group
NPV	Net Present Value

NRA	Ngarrindjeri Regional Authority
NREC	Ngarrindjeri Ruwe Empowered Communities
NRM	Natural Resource Management
ORIC	Office of the Registrar of Indigenous Corporations
PBC	Prescribed Body Corporate
PCF	Pilot Commercial Fund
RIRDC	Commonwealth Rural Industries Research and Development Corporation
SAWR	Strategic Aboriginal Water Reserve
Noongar Settlement	South West Native Title Noongar Settlement
WDC	Wheatbelt Development Commission
Station	Roebuck Plains Station / Delta Downs Station
SWALSC	South West Aboriginal Land and Sea Council
WEPP	Work Experience Pathways Projects
Yallalie	Yallalie Downs
YHC	Yawuru Holdings Company Pty Ltd

EXECUTIVE SUMMARY

The Australian National University's (ANU) First Nations Portfolio partnered with the Cooperative Research Centre for Developing Northern Australia (CRCNA), Indigenous Land and Sea Corporation (ILSC), and the Commonwealth Department of Agriculture, Water and the Environment (DAWE) to prepare a situational analysis of the Indigenous agricultural sector.

Agriculture, forestry, fisheries, and aquaculture industries, coupled with emerging markets, offer opportunities to First Nations communities interested in increasing the productivity of their lands and waters. While First Nations people hold legal interests in more than 57% of Australia's landmass, their participation in mainstream primary industries is minimal.

A key barrier for First Nations land holders and managers, policy makers, industry groups and investors, is the paucity of research examining the agricultural potential of the Indigenous estate.

The purpose of the situational analysis is to attain a better understanding of the relationship between First Nations primary production enterprises and the larger Australian primary industries.

A significant component of the research is a detailed analysis of five case studies on First Nations' primary industry enterprises on the Australian Indigenous Estate, contained in this report. The case studies underpin the principal body of research: *Barnett, R, Normyle, A, Doran, B & Vardon, M (2022) Baseline Study – Agricultural Capacity of the Indigenous Estate. Cooperative Research Centre for Developing Northern Australia Project AT.4.20211117*.

The case studies selected by the Project Steering Committee provide, as far as practicable, representation of First Nations participation in primary industries across Australia and across the primary production activities, including cattle production, plant cultivation and fisheries. Analysis of the case studies was based on identifying success factors for First Nations participation in agricultural economies premised on shifting the narrative in public policy to better engaging First Nations in primary industries.

Analysis of the five First Nations primary production enterprises comprise these common characteristics:

- A technical, commercial and governance capability building exercise that can be decadal in nature, is typical among First Nations primary industries businesses.
- First Nations primary production businesses are commercial in nature. They seek to optimise sustainable natural resource usage, to achieve financial viability and profitability and to execute diversification and expansion plans.
- Social dividends for local First Nations communities are a critical component of their primary industries business models.
- Preserving culture and Caring for Country are also critical components of First Nations primary industries business models.
- Governance frameworks based on holding-subsidiary company models that provide appropriate cultural and community oversight, whilst separating operational management of the primary production enterprise, are commonplace among First Nations primary industries business and appear to be a tried-and-tested model.
- First Nations organisations collaborate extensively with each other in the primary industries.
- The ILSC has been an important resource for establishing and supporting many First Nations primary production enterprises.
- Commonwealth, state and territory agencies and instrumentalities provide financial, research and advisory services to First Nations primary production businesses.
- To date, there appears to have been very little private capital invested in First Nations primary production businesses, potentially creating an opportunity to attract greater social impact investment to the sector.

Overall, the analysis identifies that First Nations primary production industries are diverse, increasingly financially sustainable and delivering significant cultural, environmental and social benefits to local First Nations communities and the national economy.

Modelling from Barnett et al's. situational analysis (2022) which shows 10% of the Indigenous estate is highly suitable for agricultural development, particularly along the northern Australian coastline, the east coast and the south west of Western Australia, with areas of moderate to high suitability in all states. This research confirms that there are opportunities to increase First Nations participation in primary industries.

In summary, improving the quality of data and ease of access to data concerning the Indigenous estate and Indigenous primary industries is recommended to improve decision making relating to expansion of the sectors' development. Developing a

portfolio of First Nations primary industry case studies is also recommended to support market investment and strategies of government agencies and industry groups.

However, policy development regarding First Nations participation in primary industries must ultimately be inclusive and informed by First Nations organisations. Barnett et al. (2022) present the full complement of recommendations to enhance First Nations participation in those primary industries.

INTRODUCTION

To provide greater insight into the nature of First Nations primary production enterprises and the importance of these industries to their communities, five case studies have been prepared to recognise the preconditions for First Nations participation. The decision to focus on success factors allows analysis of the case studies to shift the narrative in public policy towards First Nations engagement in primary industries.

Outcomes from the case studies contribute to the principal research work: *Barnett, R, Normyle, A, Doran, B & Vardon, M (2022) Baseline Study – Agricultural Capacity of the Indigenous Estate. Cooperative Research Centre for Developing Northern Australia Project AT.4.20211117*.

This research presents detailed information regarding the geospatial modelling and mapping of agricultural suitability and accounting for natural and social capital. Cost-benefit analysis for investment will contribute to an overall baseline assessment of the agricultural capacity of the Indigenous estate.

The situational analysis of case studies presented in this report were selected by the Project Steering Committee to provide, as far as practicable, First Nations participation in primary industries across Australia and across the primary production activities, including cattle production, horticulture and fisheries. The approximate location of each case study and type of agricultural enterprise is illustrated in Map 1.

Map 1 – Approximate location of the five case studies

Methods

This section presents the methods used to select and analyse the case studies of the organisations which are the subject of this report. Methods included defining the terms of regional agricultural investments and the Indigenous estate and criteria used to select the organisations represented in the case studies. Research methods, including the analysis, were formalised in consultation with the Project Steering Committee. Informed consent of the case study's contributors, and their participation throughout the process, was also secured.

Definitions

'Regional agricultural investments on the Indigenous estate' is defined as:

- Initiated by First Nations organisations controlled by Traditional Owners, which have a regional focus and are either a native title Prescribed Body Corporate (PBC), a land holding body created under land rights legislation, or an Indigenous

organisation under the *Corporations Act 2001* or the *Corporations (Aboriginal and Torres Strait Islander) Act 2006* (CATSI Act).

- Occurring on land, waters or the intertidal zone that is considered part of the Indigenous estate, namely: land over which native title has been determined; land which has been granted under Commonwealth or state land rights legislation; or, land privately owned by First Nations people or on behalf of Indigenous people, including pastoral leases.
- Involving primary production activities as defined by the Australian Taxation Office (ATO). These are plant or animal cultivation[1], fishing or pearling[2], or tree farming[3], including felling.

Selection Criteria

These criteria were used to select case studies of regional agricultural investments on the Indigenous estate:

1. First Nations owner(s) of the agricultural investment have given permission for their business to be a case study
2. The agricultural investment is well established (i.e. operating for at least five years).
3. The agricultural investment has a universal applicability and is relevant today.
4. The agricultural investment is likely to enhance understanding of success factors.
5. The agricultural investment has accessible data and reports including published financial accounts, independent research (preferably) and land use agreement.
6. The agricultural investment will support, if possible, an even representation across Australia and across the primary production activities.

Selection Process

[1] Plant and animal cultivation includes cultivating or propagating plants, fungi or their products or parts (including seeds, spores, bulbs and similar things) in any physical environment and maintaining animals for the purpose of selling them or their bodily produce, including natural increase manufacturing dairy produce from raw material produced.

[2] Fishing and pearling include conducting operations relating directly to taking or catching fish, turtles, dugong, bêche-de-mer, crustaceans or aquatic molluscs taking or culturing pearls or pearl shell.

[3] Tree farming and felling includes planting or tending trees in a plantation or forest that are intended to be felled, felling trees in a plantation or forest, transporting trees or parts of trees that are felled in a plantation or forest to the place where they are first to be milled or processed.

Fourteen regional agricultural investments were initially scoped as potential case studies. These were identified by members of the Project Steering Committee and through a preliminary literature review by the Project Research and Management Teams.

The agricultural investments were graded based on the selection criteria. Six of the 14 potential case studies did not meet all the selection criteria and were excluded (refer to Appendix 1 for excluded case studies).

With a view to seeking at least one case study under each of the primary production activities of the ATO, the remaining eight agricultural investments were grouped under the three defined primary production activities.

The First Nations organisations that own and operate each of the eight agricultural investments were contacted to determine their interest in being included as a potential case study and in allowing access to their data, including public financial records. Five First Nations organisations confirmed their interest in participating in the project relevant to its delivery timeframe. A First Nation organisation participating in tree farming or felling activities was unable to be secured in time for the project.

Summaries of the five confirmed potential case studies were presented to the Project Steering Committee at its inaugural meeting held on 6 December 2021. Although the project envisaged that only two to three case studies were to be undertaken, the Steering Committee determined that all five proposed case studies ought to be pursued so that they provided an even spread, as far as practicable, across Australia (three in the north and two in the south of Australia).

The five confirmed case studies are:

1. Desert Springs Farm and Centrefarm Aboriginal Horticulture Ltd – Central Australia, Northern Territory – horticulture.
2. Roebuck Plains Station and Nyamba Buru Yawuru – Kimberley, Western Australia – cattle production.
3. Delta Downs Station and Kurtijar Aboriginal Corporation – Normanton, Queensland's Gulf Country – cattle production.
4. Kuti Co and Ngarrindjeri Aboriginal Corporation – Lower Lakes and Coorong, South Australia – fishing.
5. Yallalie Downs and Noongar Land Enterprise Group – south west Western Australia – mixed agriculture, including cattle backgrounding.

Engagement Process

After the Steering Committee meeting, virtual meetings were held with each of the First Nations organisations undertaking the regional agricultural investments. A case study guide was provided including a background, a summary of materials being collected, an outline of how information will be presented, and the process for engagement (Appendix 2).

A Data Sharing Agreement (DSA) was prepared by the ANU in consultation with the First Nations organisations. It was designed to ensure the First Nations organisations would benefit from the research, and that their confidential information and cultural and intellectual property would be legally protected.

Once the DSA was executed, data was collected from each of the case studies' participants and analysed. All five First Nations organisations reviewed drafts of their respective case study and provided consent to ANU to publish their information. First Nations organisations also had the opportunity to provide comment on the entire Case Studies Report.

Case Study Analysis

These 15 factors, which were agreed to by the Steering Committee at its inaugural meeting, were used to investigate success factors for First Nations participation in primary industries. The 15 factors are grouped under the five key themes used to present each case study.

- Regional Background
    - geography, climate and water access, availability, quality, and infrastructure
- Corporate and Governance frameworks
    - land tenure
    - strategic or business plans
    - integrative culture/heritage/environment/economic frameworks
- Development model
    - community engagement strategies
    - access to resources and services
    - environmental impact and sustainability
- Business framework
    - scale of activity – land use, annual/perennial, single or multipurpose
    - markets and accessibility

    - profitability – return on capital investment
    - partnerships and access to capital (i.e. government, industry, investors)
    - capital assets, infrastructure
    - personnel/management – skills and capabilities
- Community benefit
    - cultural return on investment and community benefit
    - access to mainstream producers

Using the above groupings, each of the five case studies frames the preconditions for First Nations participation in primary industries.

DESERT SPRINGS FARM AND CENTREFARM ABORIGINAL HORTICULTURE

Horticultural development on Aboriginal land in the Northern Territory

Acknowledgements

ANU pays respects to the Traditional Owners of the Warrabri Aboriginal Land Trust, the Kaytetye, and Alyawarr, and residents who live in the community of Ali Curung in Central Australia. ANU also acknowledges the invaluable contributions of the case study partners, Centrefarm Aboriginal Horticulture Ltd and Alekarenge Horticulture Pty Ltd and their respective supporting agencies, the Central Land Council and Northern Land Council.

Brief Overview

Alekarenge Horticulture Proprietary Limited (AHPL) has a formal agreement with Centrefarm Aboriginal Horticulture Limited (Centrefarm) to manage its lease area, known as the Desert Springs Farm that is located on Aboriginal land in Central Australia. AHPL and Centrefarm rent the lease area to AFM Central Australia Pty Ltd (AFM), a non-Indigenous family business, through a formal licence agreement. AFM has developed a successful horticultural development on 500 hectares (ha) within the 1200 ha lease area that is producing approximately 8,000 tonnes of watermelons annually and Central Australia's first commercial peanut harvest. At the same time, the Traditional Owners have benefitted through lease rental payments, training and employment.

Regional Background

Location

The Desert Springs Farm (DSF) is located on the Warrabri Aboriginal Land Trust near the Ali Curung community (refer to Map 2). Ali Curung (Alekarenge in Kaytetye language, meaning dog or dingo) is a small Aboriginal community located about 390 km north of Alice Springs and 170 km south of Tennant Creek in the Barkly Region of the Northern Territory. All the land within the Warrabri Aboriginal Land Trust became Aboriginal land when it was included in Schedule 1 of the Commonwealth's *Aboriginal Land Rights (Northern Territory) Act 1976* (the Land Rights Act).

Services at Ali Curung, accessible via a sealed road, include the Barkly Regional Council service centre, bakery, store, police station, school (ages 4 to 16), safe house, hardware store, aged care, art centre and gallery, church, health centre, water treatment plant, waterpark and mechanical workshop.

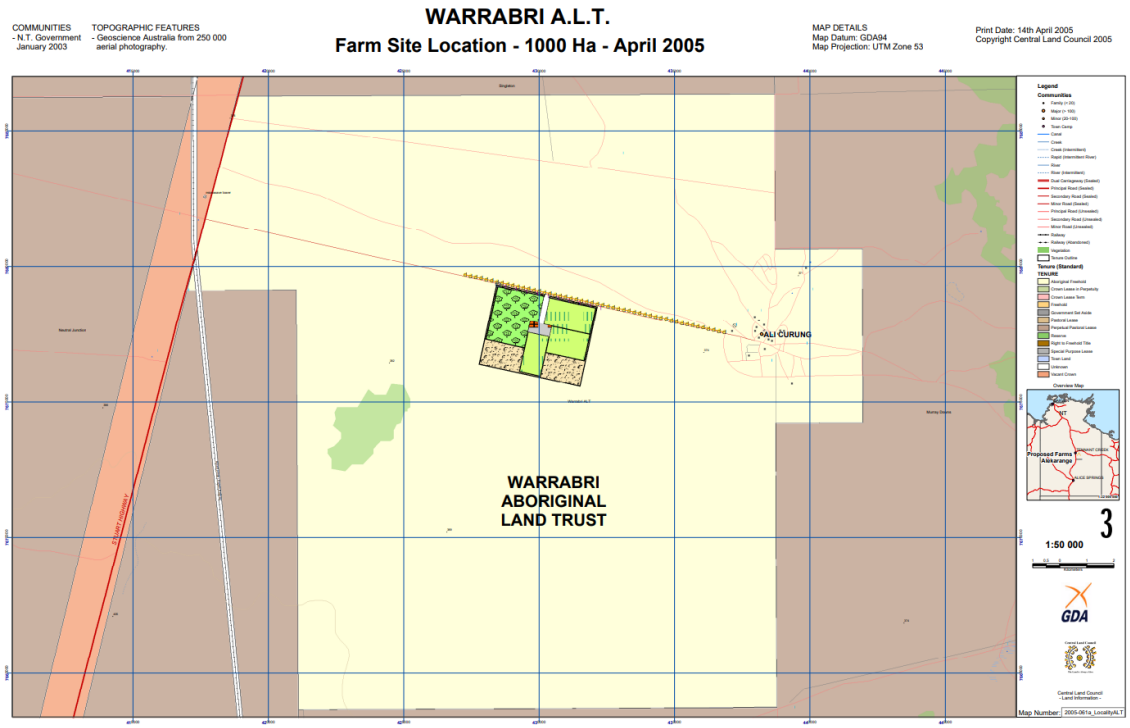
Demographics

Ali Curung is a small remote town. In 2016, the population of Ali Curung was 494[4]. Nearly 86% of the population identify as Aboriginal with the majority from Warlpiri and Warumungu clans and the minority from Warlmanpa, Alyawarra and Kaytetye clans. The main languages spoken include English, Warlpiri and Alyawarr.

In 2017, Aboriginal people made up about 63% of the workforce in Ali Curung[5]. At the same time, the Aboriginal unemployment rate was 40%. Community and personal service workers made up nearly 30% of employment, professional people about 25%, managers 13%, sales workers 11%, and laborers 10%. About 21% of employed people worked in local government administration roles. Other major employers included state government administration, primary and secondary education, creative arts (musicians, writers, and performers) and postal services. The median weekly personal income for people aged 15 years and over was about $254.

[4] Australian Bureau of Statistics (ABS) Ali Curung 2016 Census QuickStats. Retrieved from: https://www.abs.gov.au/census/find-census-data/quickstats/2016/SSC70004

[5] Northern Territory Government 2017 Remote town job profiles, Ali Curung. Retrieved from: https://nt.gov.au/employ/for-employers-in-nt/skills-existing-and-needed/remote-town-job-profiles/ali-curung



Map 2 – Map area of Warrabri Aboriginal Land Trust showing site location of Desert Springs Farm in conjunction with the Ali Curung Township (source: Centrefarm Aboriginal Horticulture Ltd)

Colonial History

The Traditional Owners of this region have faced a history of dispossession, marginalisation, and subsequent welfare dependence. This has not been fully addressed solely through the return of their land.

Previously, Ali Curung was called Warrabri when it was established as an Aboriginal reserve in 1956 under the *Northern Territory Aboriginals Act 1910*. It was established because the water supply was exhausted at the Phillip Creek Baptist Mission north of Tennant Creek (Welfare Branch 1959). At the time, Aboriginal residents were wards of the Chief Protector of Aborigines who had the authority through the *Aboriginal Ordinance (Cth) 1911* to forcibly remove mixed-race children from their Aboriginal parents (AIATSIS 2010; Australian Human Rights Commission 2007). In 1947, children detained at the Phillip Creek Baptist Mission were sent over 1000 km away to Darwin's Retta Dixon Home which accommodated displaced Aboriginal children.

At Warrabri, Aboriginal people were employed outside the settlement in the pastoral and droving industries and others worked in regular jobs within the settlement. Missionaries from the Australian Baptist Home Mission also provided welfare services at Warrabri from 1957. In this period, the Commonwealth's Welfare Branch appointed a

non-Indigenous superintendent to manage the settlement. From 1977, following a directive of the Commonwealth's Department of Aboriginal Affairs, elections were held for a council which was representative of local groups. The Ali Curung Community Government Council continued to operate until the establishment of shires by the Northern Territory Government in 2008.

From 2007, Ali Curung was a prescribed community under the *Northern Territory National Emergency Response Act 2007* which comprised a series of land, health, social security, education and housing measures developed and imposed by the Commonwealth. This included prohibiting alcohol, quarantining 50% of social security payments to be spent on assumed priority needs of Aboriginal people and compulsorily acquiring communities through 5-year leases. These measures were imposed on all prescribed communities without any prior consultation and despite Traditional Owners having land rights and were considered by many Aboriginal people to be highly discriminatory.

The Northern Territory Emergency Response ended in 2012 and, today, Ali Curung is part of the Alyawarr ward of the Barkly Shire administered by the Barkly Regional Council, which is governed by elected members as a Local Authority in accordance with the *Local Government (Northern Territory) Act 2019*.

Geography and Climate

The geography of the Warrabri Aboriginal Land Trust area is arid with open spinifex grassland on red sand plains. It is dry for most of the year with little or no surface water (Burgess et al. 2016). The climate is desert like. Summers are very long and hot and winters are cool in the mornings and sunny in the day. Average maximum and minimum temperatures are 32.3ºC and 16.6ºC respectively[6]. Mean annual rainfall is 386.6 millimetres (mm).

Water resources

Ali Curung is situated within the Central Plains region of the Western Davenport Water Control District declared in 2009 by the Northern Territory Government under the *Northern Territory Water Act 1992*. Groundwater accounts for all water supplies within the district which is centred on Kaytetye country with approximately 41% of the district

[6] Bureau of Meteorology Climate Statistics summary Ali Curung. Retrieved from: http://www.bom.gov.au/climate/averages/tables/cw_015502.shtml

recognised as Aboriginal land. Rules apply to people accessing water, including permits for bores and water access licences (Northern Territory Government 2021).

On 6 December 2021, the Northern Territory Minister declared the Western Davenport Allocation Plan 2021–2022 to replace the 2018–2021 water allocation plan. The Minister stated in the press release that the 2021–2022 plan ensures continuity of water management and regulatory arrangements in the Western Davenport Water Control District, and notes that in recent years there has been strong interest in developing large horticulture developments on pastoral leases and Aboriginal land in the district[7].

Water for consumptive use (i.e. for agriculture and manufacturing) in the Central Plains region is 87,720 megalitres (ML) per year, of which 86,970 ML per year is allocated for agriculture use. Approximately one third (26,091 ML per year) has been set aside under a Strategic Aboriginal Water Reserve (SAWR) for the purposes of Traditional Owners, an allocation which is raised further under the Future Directions section.

Image 1– Irrigated cropping on Desert Springs Farm (source: Centrefarm Aboriginal Horticulture Ltd)

[7] Northern Territory Government News 6 December 2021, Western Davenport Water Allocation Plan. Retrieved from: https://depws.nt.gov.au/news/2021/western-davenport-water-allocation-plan

Soil and Land Suitability

What is now the Northern Territory Government's Department of Environment, Parks and Water Security, in 2015–2016 undertook a soil and land suitability assessment in the Ali Curung area in parallel with a review of the Western Davenport water allocation plan (Burgess et al. 2016).

The investigation, in total, covered an area of 47,610 ha of Aboriginal and pastoral lands and identified more than 43,840 ha of land suitable for a range of irrigated agricultural crops. It describes the soils associated with these suitable lands as predominantly deep, Aeolian derived, red earthy sands and sandy surfaced red earths on level sand plains.

The investigation also confirms that agricultural development within the Tennant Creek region requires irrigation. The DSF, as noted already, is located within the Western Davenport Water Control District. However, the investigation indicates that the lands identified in the report as suitable for agriculture, provide a land bank far more than what the groundwater supplies are likely to support.

The Department's report notes that more extensive mapping of the soil and land capability is required to support development expansion and that further studies are underway to better understand groundwater availability and biodiversity assets in the area. Of interest is that the Department is also producing a range of comprehensive soil and land suitability studies to identify options for irrigated agricultural development on pastoral, Aboriginal and Crown land across the Territory. Completed surveys include other major areas of the Indigenous estate such as Wadeye and the Tiwi Islands.

Corporate and Governance Framework

Land Tenure: Section 19 Land Use Agreement

A Section 19 Land Use Agreement under the Land Rights Act was granted by the Central Land Council (CLC) in 2007 of 1200 ha within the Warrabri Aboriginal Land Trust area to AHPL to establish DSF for horticultural purposes. The term of the lease is 30 years with an option for the lessee (AHPL) to extend the term to a maximum of 90 years (this option has been exercised by AHPL). Because the lease was for more than 40 years, the consent of the Commonwealth Minister for Indigenous Affairs was also required under Sections 19 (4A) and (7) of the Land Rights Act. AHPL is required to pay lease payments to the Traditional Owners under the lease which were $20,000 per year at the time of this report, with the balance of DSF rent monies paid to AHPL used

for community benefit to fund projects like the Ali Curung Work Experience Pathway Project (WEPP) discussed later.

In January 2008, AHPL and Centrefarm signed an agreement that granted an operator licence to AFM, a family-owned and non-Indigenous business to commence large scale horticulture on the lease area (the land was undeveloped at the time the licence agreement was settled without any commercial activity). AFM was granted a right to occupy all the lease area and use its ground water for the purpose of growing horticultural crops of its choice. AFM chose watermelons because the climate of Central Australia would enable it to extend the times which it can grow this crop.

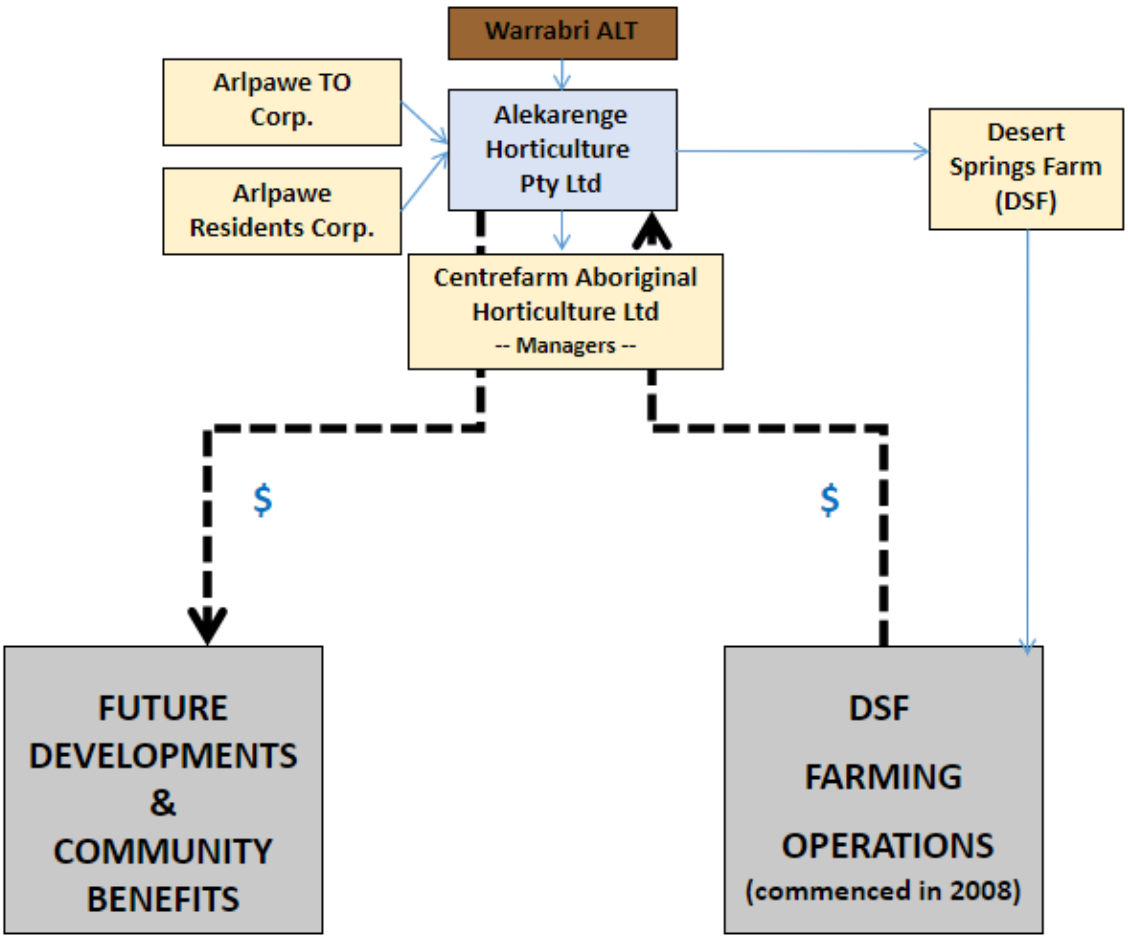


Figure 1 – Alekarenge Horticulture Pty Ltd business model (source: Centrefarm Aboriginal Horticulture Ltd)

Land Holding Entity: Warrabri Aboriginal Land Trust

The Warrabri Aboriginal Land Trust holds the inalienable freehold title under the Land Rights Act. This means that the land is owned in perpetuity but, uniquely, it cannot be bought, sold, mortgaged, used as collateral for a loan or resumed by the Northern Territory Government, although estates and interests such as leases can be granted to

others. This is under Section 19 of the Land Rights Act and can only occur with the agreement of the Traditional Owners.

While title to the land is vested in the Warrabri Aboriginal Land Trust, decisions about the use of the land are made by its Traditional Owners who instruct the CLC. The CLC is one of four Land Councils established as Commonwealth statutory bodies under the Land Rights Act. To date, the CLC manages freehold title granted over more than 417,000 km^2, covering over half of the southern portion of the Northern Territory. It represents the rights and interests of approximately 24,000 Aboriginal constituents, roughly a third of the Northern Territory's Aboriginal population. Governed by a Council of 90 elected members, it also functions as a native title representative body as set out under the *Native Title Act 1993*. The CLC negotiates on behalf of Traditional Owners for grants of estates or interest under Section 19 of the Land Rights Act with people interested in using Aboriginal land. The CLC provides legal assistance and consults with Traditional Owners and affected groups about proposed interests and obtains their informed consent before making an agreement on their behalf, including the lease agreement with AHPL.

Business Entity: Alekarenge Horticulture Proprietary Limited

AHPL is owned by the Arlpwe Aboriginal Corporation (AAC) and the Arlpwe Residents Aboriginal Corporation (ARAC) in equal shares who represent the Traditional Owners and other Aboriginal people of Alekarenge community on the Warrabri Aboriginal Land Trust (refer to Figure 2). Arlpwe is pronounced *Ahl-boa* and relates to the lack of surface water, only soakage, associated to the spinifex country.

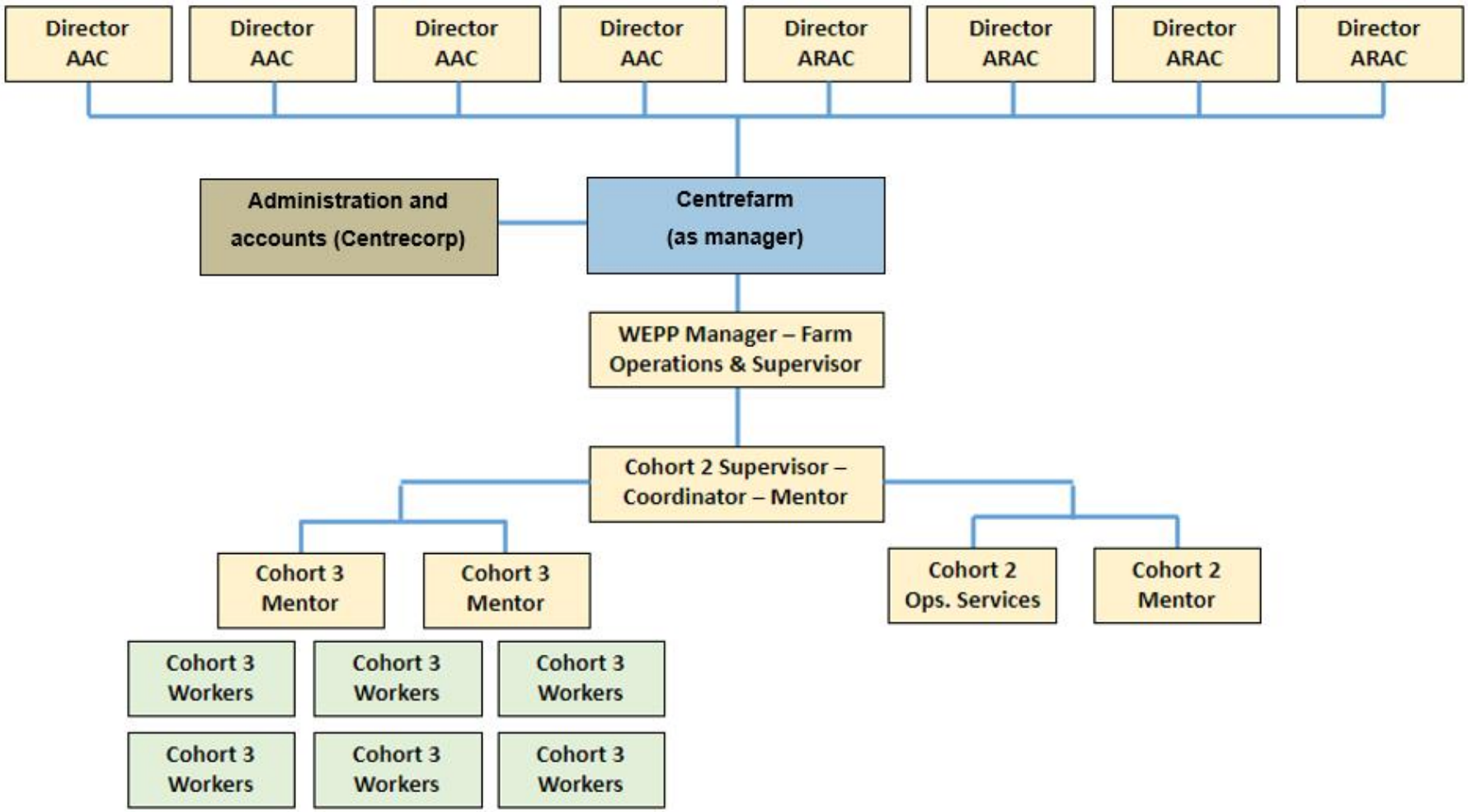


Figure 2 – Alekarenge Horticulture Pty Ltd corporate structure (source: Centrefarm Aboriginal Horticulture Ltd)

The AHPL's board is made up of elected Directors from the AAC and ARAC (see Image 2). AHPL holds the head lease to DSF and is responsible for its overall direction and activities. DSF rental returns provide income for community purposes, including on-the-job training and capacity building.

Image 2 – Alekarenge Horticulture Pty Ltd Annual General Meeting (source: Centrefarm Aboriginal Horticulture Ltd)

Manager: Centrefarm Aboriginal Horticulture Ltd

Centrefarm is a not-for-profit company owned by Aboriginal people based in Alice Springs. It was established out of the CLC in 2002 to provide benefit to Traditional Owners in the Northern Territory through driving the commercial and sustainable development of their lands, which cover over 50% of the Northern Territory's land mass.

Centrefarm's core role is to identify at-scale commercially viable opportunities on Aboriginal land, chiefly primary industries, and develop them as the foundations for new regional economies.

Its approach is unique with firstly the use of fungible Section 19 leases granted under the Land Rights Act and operating under an Economic Development Strategy (EDS) that it developed jointly with the Northern Land Council (NLC) and CLC for the mainland Indigenous estate in the Northern Territory (see Figure 3).

According to Centrefarm, the EDS is not a discrete single project, but a comprehensive, long-term plan that encompasses both the commercial and the cultural requirements necessary to ensure Aboriginal control at every stage (FTI Consulting 2021). The EDS addresses the transition from welfare dependence to economic participation; and the adaption of systems, policies, and approaches to ensure Traditional Owners have control of the process (Centrefarm and TopEndfarm 2022).

Importantly, it was developed from a position that the conventional approach to economic development on Aboriginal land in the Northern Territory had proven to consistently fail.

The purpose of the EDS is to:

1. Facilitate the entry of capital onto Aboriginal lands to develop greenfield sites and create wealth (equity) for the Traditional Owners.
2. Leverage the significant Aboriginal land asset base to achieve economic independence for Aboriginal Territories.
3. Secure a flow of capital into remote areas for infrastructure development.
4. Stimulate commercial activity in local and regional areas.
5. Provide social, cultural, and economic benefits to local communities.

During the construction phase and ongoing operations, WEPP was utilised which created the Ali Curung WEPP that ensures local Aboriginal people are trained and employed.

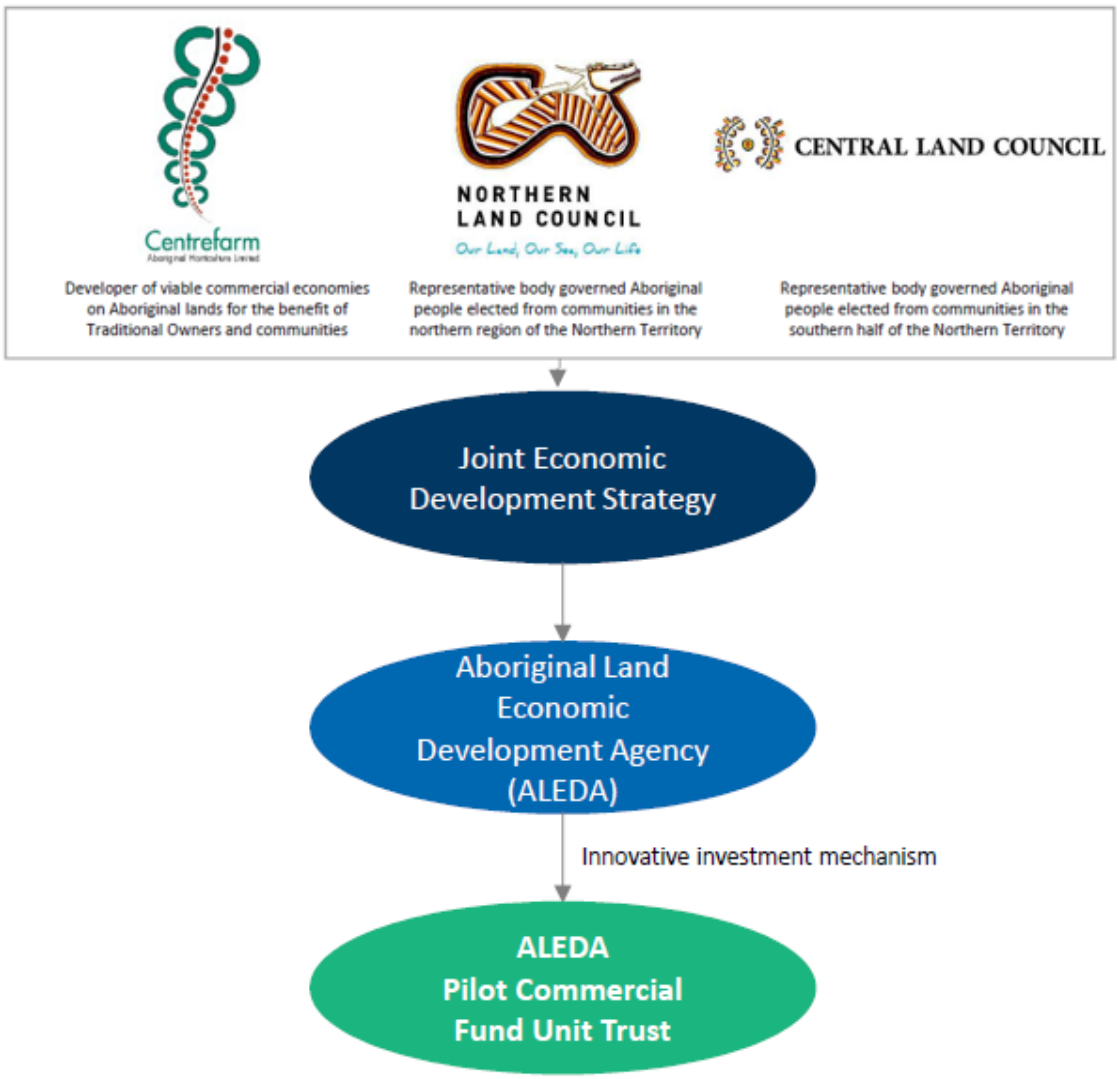


Figure 3 – Schematic of the Centrefarm Aboriginal Horticulture Ltd, Central Land Council and Northern Land Council Economic Development Strategy framework (source: FTI Consulting 2021)

Operator: AFM Central Australia Pty Ltd

AFM operates its horticulture business under a licence. The operator licence agreement, effective for 90 years, also needed to be approved by the Commonwealth Minister for Indigenous Affairs under Section 19 (8) of the Land Rights Act. In the operator licence agreement entered into by AFM, AHPL and Centrefarm, it is indicated that the development will provide considerable scope for employment of Ali Curung residents and commercial opportunity for the Traditional Owners of the Warrabri Land Trust.

The terms of the operator licence, agreement include that AFM must give employment and contract opportunities to Aboriginal residents. Also, under the licence to operate, AFM is required to pay to AHPL fees currently averaging a total of $232,500 for:

1. Land Access (i.e. $20,000 per year) that AHPL then pays directly to the Warrabri Land Trust via the CLC to disperse case benefits to Traditional Owners;
2. Water Usage at $100 per ML for an average use of 2,000 ML (average total $200,000 exc. GST); and
3. Land Usage at $25 per ha for currently 500 ha cultivated (currently $12,500 exc. GST).

Water Licence

DSF holds a Ground Water Extraction Licence (GWEL) of 6000 ML, from which up to 3,500 ML is possible to be used within the lease area for the DSF. The Northern Territory Government does not charge for water extracted under the GWEL.

Development Framework: Centrefarm Aboriginal Horticulture Ltd

Centrefarm has a leading role in building the capacity of Traditional Owners and facilitating their interests in the commercial and sustainable development of their lands. The foundation of Centrefarm's development model is a commitment to place-based and people-centred projects placing good relationships at the heart of intercultural two-way learning. This model has evolved from lessons learnt over many years from past projects delivered through varied agencies, including Centrefarm, other Aboriginal organisations, and government.

Centrefarm's involvement in Alekarenge began when the leases were granted in 2008 and the current governance structures were put in place. In 2011, when monies began to flow from the subleased commercial operation, it was necessary to prepare directors and members (most of whom were Traditional Owners) to understand good governance principles and to make decisions in line with the duties of a director relevant to requirements under the CATSI Act.

Centrefarm secured funding to run a series of approximately 12–15 three-day workshops that were delivered between 2011 and 2014 at the Alekarenge training facility. Workshops focused on corporate governance using place-based, people-centred development practices and highlighted and valued equivalent customary governance practices. Attendees included Alekarenge Traditional Owners and residents, directors and members of AHPL and its subsidiaries.

Near the end of the process, directors and members expressed the need for a map of their land showing the Warrabri Aboriginal Land Trust and the lease areas and their perspectives for the management and use of their Country. Cultural and economic mapping of Country, as done in other remote communities, such as Mulan in Western Australia and Willowra in the Northern Territory, is widely used as a tool to aid community governance and assist Traditional Owners to make commercial decisions about the use of their land (Mahood 2016; Muecke & Roe 2021).

Co-mapping on Country

Another foundational element of Centrefarm's development model is what it refers to as 'Co-mapping on Country' (Centrefarm 2021). In 2019, Centrefarm staff and consultants returned to Alekarenge to begin the process with Traditional Owners, directors and members of AHPL to develop a large, multi-purpose canvas map of Alekarenge country that privileges stories, sites, flora, fauna and language that they viewed as being useful for making decisions about their economic and social developments. Their site visits enhanced the two-way learning process, which included the encouragement of participants to assist the consultant with making the map, the dictionary with words and meanings, plant identification and story-telling.

The map was completed after two two-week visits in 2019. A 'big book' outlining the co-mapping process, complete with pictures of all activities and participants involved, was also developed. The Traditional Owners decided to delay the celebration of the map until the big book was completed so the two could be launched and celebrated together. They identified the usefulness of the map and big book for economic and social purposes, including in the intercultural communication and education for commercial use of land, and in the education of their youth.

The map and big book funded by Centrefarm and AHPL is on display in the training centre and is now used for the WEPP (see Image 3).

Image 3 – Traditional Owners using their co-designed map to discuss their interests in the Warrabri Land Trust area (source: Centrefarm Aboriginal Horticulture Ltd)

The main lesson for Centrefarm coming from Alekarenge was that co-mapping should occur first, and all other activities, including establishing governance structures, two-way governance workshops and decision making about land, come after the canvas map and big book exist.

Subsequently, Centrefarm instigated a co-mapping exercise for Aboriginal Land Economic Development Agency's (ALEDA) Mataranka project in 2020-2021, which is a greenfields site. The total value of this co-mapping project is $490,500 and it includes a capacity development component so others can facilitate or support co-mapping. Centrefarm supports this activity through one-off funding ($224,000) provided by the Cooperative Research Centre for Developing Northern Australian (CRCNA) under its Co-mapping on Country: Train the Trainer project for sustainable development[8]. Other in-kind contributions are provided through partnerships with the North Australian

[8] CRCNA Co-mapping on Country: Train the Trainer for sustainable development. Retrieved from: https://crcna.com.au/research/projects/co-mapping-country-train-trainer-sustainable-development

Indigenous Land and Sea Management Alliance Ltd, the NLC and Charles Darwin University.

Built into this innovative project is an independent Developmental Evaluation, which has already highlighted the strengths and challenges of Co-mapping and preparing others to do this work. The Developmental Evaluation will add to Centrefarm's knowledge base, lessons learnt and future planning for co-mapping and two-way governance activities.

Work Experience Pathways Project (WEPP)

The WEPP arose from building on all the previous capacity development activities, meetings and discussions conducted with Traditional Owners, directors and members of AHPL in conjunction with Centrefarm.

Established in 2020, the WEPP includes a 130 ha commercial facility built on an area outside the DSF and within the Warrabri Aboriginal Land Trust area. The facility was previously used for two-way governance workshops and the co-mapping exercise. AHPL holds the lease for a peppercorn (negligible) rental. The facility is now used to provide unique on-the-job training in horticulture for primary and high school students and adult members of the Alekarenge community (Centrefarm 2019). Training is provided in horticultural plot development; fencing, irrigation, and plot management; plant propagation and establishment; and marketing and transportation. The WEPP is designed to build local capacity and improve employment pathways while trialling a tailor-made approach to job services, training and producing local marketable fresh food.

In 2021, the WEPP successfully engaged 15 middle-school students, 27 senior-school students and 11 adult community members in learning, training, work experience and employment activities. For the first time in Alekarenge, 10 trainees graduated in 2021 with a Certificate I in Agrifood Operations. This is a noteworthy milestone as students were previously unable to complete formal education past middle school in the community.

In addition, the adult cohort has established larger horticultural plots within the WEPP farm and selling produce to supermarkets in Alice Springs and Tennant Creek.

Using the WEPP, APHL is trialling various crops and testing the market. For example, AHPL successfully completed its second garlic growing trial in 2021, which included representatives from Garlic Australia visiting the farm to appraise the crops. The

harvest was shipped to Victoria for further analysis and negotiations are now in progress for a potential commercial crop to be established.

Further, one hectare of pumpkins has been trailed, and despite hotter than average temperatures in 2021, the crop flourished. Experimental trial crops also include cabbage, a selection of potato varieties, and watermelons. The cabbage and pumpkin harvest were sold to IGA supermarkets in both Alice Springs and Tennant Creek which is now developing a supply chain between APHL and local markets.

AHPL plan to establish a greenhouse under the WEPP to trial greenhouse crops (such as lettuce, bok choy, pak choy and herbs) and sell them to the Mirnirri Store in Alekarenge.

According to Centrefarm, the WEPP has received small grants from the Commonwealth's National Indigenous Australians Agency (NIAA) and the ILSC for trainee subsidies and for the purchase of equipment. In the longer term, Centrefarm wants to make the WEPP self-sufficient through the sale of farm produce. For now, however, it still needs external support.

Aboriginal Land Economic Development Agency (ALEDA)

A core feature of the EDS that was developed by Centrefarm with the CLC and NLC, is the establishment of ALEDA which was incorporated in 2018 as a wholly owned for-profit subsidiary of Centrefarm. ALEDA acts as the agency to implement and drive 'at-scale' multi-industry developments throughout the Northern Territory. It also acts as the point of reference and the lead agency for economic development on Aboriginal land.

Currently, ALEDA's pilot phase includes developing six commercial horticultural operations (greenfields), three in the CLC area (all in the Western Davenport Water Control District near and additional to DSF) and three in the NLC area, and two Work Experience Pathways Projects (one each in the NLC and CLC regions). A significant funding contribution is being sought to develop infrastructure for these horticultural operations from the Commonwealth's Northern Territory Aboriginals Benefit Account (ABA) which is established under the Land Rights Act and into which the Commonwealth appropriates the equivalent of mining royalties paid by miners on Aboriginal land.

ALEDA is committed to monitoring and evaluating its delivery in meeting the National Agreement on Closing the Gap (CtG) targets. In November 2021, Centrefarm submitted a proposal to NIAA to include the ALEDA Alekarenge horticulture project as one of its six CtG Data Projects to be established by 2023 (ALEDA 2021).

Participating as one of the CtG Data Projects would enable the design of a data collection system and access to tools at both the community and regional levels to:

- Allow Aboriginal community members to drive their own development agenda;
- Measure the impact of real-life social and economic projects;
- Facilitate collaboration and link stakeholders in communities that are already working together; and
- Place Aboriginal people in the driver's seat, provide employment opportunities, and become the benchmark for data digital inclusion (CtG Target 17).

Assessing social outcomes according to the CtG targets would allow ALEDA to measure program effectiveness and progress.

Other partnerships

The Northern Territory Department of Industry, Tourism and Trade (DITT) has provided some research support. Both AFM and Centrefarm, through their membership on the NT Farmers Association are constantly working to increase and improve research, development and extension provided by DITT. The Department and Centrefarm have recently executed a Materials Transfer Agreement so that 300 mango trees (three new varieties) can be established at the WEPP facility. Early-stage negotiations are also currently occurring regarding a table grape variety and an avocado variety being established at the WEPP facility.

Business Framework: Desert Springs Farm

Market background

DSF has sealed road access and is close to major transport corridors including the Stuart Highway. Market accessibility is directly through AFM which employs its own specialist marketer, based in Brisbane. The specialist coordinates quality control, sales and logistics to all national markets and capital cities. The watermelons are mostly sold through Woolworths and from time-to-time, other major Australian retailers.

Employment

The owner of AFM resides at DSF and manages it on a day-to-day basis. A small number of permanent staff members are employed by AFM to sustain its operations including the bore field. Seasonal professional pickers, often from overseas, are employed by AFM during the watermelon harvest season (see Image 4). So far Traditional Owners and residents of Ali Curung have only haphazardly taken up

employment on DSF due to a gap in capability and capacity, with which Centrefarm is assisting through its management arrangement with AHPL and WEPP.

Land and water use

DSF leases 1,200 ha but is currently using only 500 ha (40% of the available licence area) to grow rotational crops of chiefly watermelons. The farm receives an average of 387 mm annual rainfall. However, crop effective rainfall is negligible (10%) because most of the rain falls in months when there are no crops. As such, ground water is extracted to irrigate crops using a drip system. On average two crops of watermelon require about 7 ML of water per ha per year.

Peanuts are currently being trialled to harvest for the market. Peanuts are normally grown as a cover crop used for their high nitrogen value to improve soil quality. Historically peanuts have failed as a viable crop in the Northern Territory particularly in the Katherine region due to the prohibitive cost of transporting light peanut shells to the processing facilities in the eastern states. However, a trial is being done for peanut value-adding by re-fitting a second-hand peanut shelling facility on the farm.

Like watermelons, peanuts require about 7 ML of water per ha per year. Final gross margin analyses are being developed as the peanut trial progresses. Once this facility is available, the process of deshelling peanuts will lead to greater tonnage of actual peanuts versus shells leaving the farm. It is believed that through this simple approach being done for the first time in the Northern Territory, peanuts will not only serve the rotational requirements for watermelons but be a viable crop.

Image 4 – Watermelons being harvested at the Desert Springs Farm (source: Centrefarm Aboriginal Horticulture Ltd)

Capital Investment

Infrastructure expenditure for DSF totals $8.76 million (refer to Table 1). From this amount, DSF paid 70% ($6.15 million) toward infrastructure investment and the remaining 30% ($2.6 million) was granted to Centrefarm from ABA. The purpose of the one-off grant was to make the AHPL lease area suitable for horticultural activities.

As a consequent to this capital investment, DSF now has all the required infrastructure, including an irrigation system, housing, and packing sheds.

Table 1 – Breakdown of the infrastructure investments in the Desert Springs Farm

Infrastructure Investment	Expenditure
Aboriginals Benefit Account (ABA) Contribution	
Construction of a bore field (8 production bores and 2 monitoring bores) with a capacity of 100 litres/second, surrounding fencing and water mains to the lease area	$ 2 million
Electricity reticulation from the Northern Territory electricity grid to the DSF	$600,000
Total ABA contribution for the existing infrastructure	**$2.6 million**
AFM Central Australia Pty Ltd (AFM) contribution	
Equipping the bores @ $95k/bore	$760,000
Sub mains, irrigation reticulation and controls	$400,000
Accommodation for farm labourers and managers	$1.5 million
Packing and machinery sheds	$1.5 million
Refrigeration	$1 million
Land clearing, plot preparation @ $2000/ha	$1 million
Total AFM contribution for the existing infrastructure	**$6.16 million**
Total Expenditure	**$8.76 million**

Farm profitability

Alekarenge Horticulture Pty Ltd (AHPL) Income

As mentioned above, the AFM currently pays to AHPL, on average, $232,500 per year with respect to the operator's licence for land access and land and water usage fees. This is equivalent to $465 per ha across the current use of 500 ha or nearly $194 per ha across the full licence area of 1,200 ha, when using about 4 ML of water per cultivated ha. At the current value and land use scenario, nearly $21 million will be paid to AHPL over the term of the operating licence.

Indicative pumping cost rates using Power Water grid rates is about $85 per ML in Central Australia with pumps placed about 40 metres below the surface. DSF is currently using less than 60% of the water access entitlement. Should DSF in the future use its full water entitlement (3,500 ML), its payment to AHPL would increase according to terms under its operating licence to on average a total of $395,000 per year or nearly $35 million over the term of the lease.

Net Present Value (NPV)

Watermelons yields on DSF vary from 50–90 tonnes per ha and farm gate prices vary from $700 per tonne to $1,000 per tonne. Pre-harvest costs (including land rental)

range from $8,000–$9,000 per ha. Post-harvest and marketing costs range from $25,000–$30,000 per ha. After deducting these costs, gross margins vary from $10,000–$40,000 per ha. The average historical yield and price of watermelons were 70 tonne per ha and $800 per tonne. This gives a gross value or revenue of $56,000 per ha.

Meanwhile, the land rental fee has increased recently by about 70% ($725 per ha). DSF also pays $20,000 land access fee every year, so for 200 ha it will be $100 per ha per year. This additional cost, once included in the land rent fee, is increased to $825 per ha. Similarly, the costs for pre-harvest ($8,356), post-harvest ($2,455) and market costs ($19,880) have changed, and total variable costs are $31,416 per ha per year. Less yield and lower prices reduce gross value and after deducting the variable costs gives a gross margin of $24,484 per ha per year.

The gross margin of $24,484 per ha is still higher than the gross margins estimated in previous studies for both annual and perennial activities in the Murray Darling Basin (Qureshi, Whitten & Franklin 2014; Qureshi et al. 2015). According to these studies, gross margins of annual activities (including cereals, cotton, rice and dairy) varied from about $500 to $1,500 per ha, whilst the gross margins of vegetables and fruits varied from about $4,000 to $10,000 per ha.

One of the key factors that determine these high gross margins or net incomes is that DSF is established, and infrastructure is available. When the above-mentioned capital costs, paid only by DSF, are included, and a planning horizon of 25 years is considered for 200 ha of watermelon, using a 5% discount rate gives a Net Present Value (NPV) of about $66.3 million. NPV per ha over 25 years is about $331,530 and for one year it is $13,261. When the $2.6 M capital provided by ABA is also included, this slightly reduces NPV per ha to $12,741.

The above NPV figures show that, even after including all the capital costs (DSF and ABA incurred on infrastructure development), the farm is still financially attractive. Given the variation in crop yield and price of their commodities, the impact of change in the values of these variables or factors was also examined. When the yield is reduced from 70 tonnes per ha to 60 tonnes per ha and price from $800 per tonne to $700 per tonne, the new NPV per ha per year is about $4,454. When the yield and price are further reduced to 50 tonnes per ha and $600 per tonne, respectively, the new NPV per year is minus $2,649 per ha. However, if the values of these factors rise the NPV increases indicating that yield and price play a critical role in the profitability of watermelon production, as is the case in all agricultural enterprises.

NPVs from AHPL's perspective were also estimated. The above-mentioned $2.6 million ABA investment for infrastructure plus the land rent fee ($232,500) and bore repairs and maintenance costs ($30,000) per year were accounted. After considering these costs and benefits, the NPV for AHPL is $396,725 over 25 years, $793 per year and $32 per ha per year. These figures are much lower than what was estimated above for AFM. Though these NPVs indicate AHPL's slightly weak (though still positive) financial position compared to the operator, the current and future social benefits that are not measurable in direct dollar terms also need to be considered.

Future development potential

As mentioned above, DSF are trialling peanut value-adding by modifying a peanut shelling facility on the farm. The plan is to grow about 300 ha of peanuts and 200 ha of watermelons.

Data including peanut production yield (tonne per ha), price ($ per tonne), water usage and cost of production data (obtained from other regions in Australia and adjusted to account for any factors, such as inflation) along with the local watermelon production and its costs and benefits were analysed in an Excel model. Centrefarm informed that to cultivate 300 ha, peanut production would require expanding the bore field (five production bores with additional capacity of 62.5 litres per second with a capacity of 100 litres per second). This would incur $500,000 and would be paid by AHPL or through a grant if successful. It would also require land clearing, plot preparation for peanuts at $200 per ha a cost of $600,000 and additional centre pivot irrigators (three at $110,000) costing $330,000. These additional total expenses ($930,000) will be incurred by AFM. Total infrastructure cost paid by AHPL for the DSF would increase to $10.665 million.

Considering a planning horizon of 25 years and using a 5% discount rate and considering all the existing and new infrastructure costs (including capital cost incurred by AFM and ABA), operating and variable costs, the estimated NPV of $66.8 million and a NPV of about $62 million for 25 years, equates to $123,774 per year and $4,951 per ha per year. These values show that expansion of the farm and growing 200 ha watermelon and 300 ha peanuts is profitable and a worthwhile investment.

Accounted for are all the costs incurred by AHPL for the existing and new infrastructure (i.e. $3.1 million) and operating cost of bores and repair maintenance (i.e. $30,000 per year) along with the increased revenue (a total of $395,000 per year) due to the maximum use of water and land for watermelon and peanut production. Considering these costs and benefits, and assuming a planning horizon of 25 years with a 5%

discount rate, NPVs could be achieved of $2.3 million over 25 years at $4,603 per year and $184 per ha per year. However, these NPVs are lower for AHPL than the NPVs from the operator's perspective. Yet they are higher than the NPVs were when only 200 ha of watermelons were grown.

Future directions

Securing Aboriginal Land Economic Development Agency Pty Ltd (ALEDA)

APHL's interest in horticultural development of their land was a key driver of Centrefarm's strategic direction to establish ALEDA in 2018. As mentioned earlier, among its six pilots, ALEDA is currently in the planning stage of developing two of those farms close to DSF. It is envisaged that these farms will provide more jobs and diverse work windows conducive to providing more meaningful job pathways for the Alekarenge community (Centrefarm 2019; ALEDA 2021).

The plan is to offer short 25-year subleases to professional farm operators and annual rent would be calculated as a percentage of capital expenditure. This is hoped to give a generation to build the capability of the Traditional Owners to take over the operations of the farm, with full divestment that is debt-free within 40 years.

ALEDA has also designed an innovative investment mechanism (the Pilot Commercial Fund) to bring public and private capital onto Aboriginal land for the first time and provide proof of concept for the Land Councils' EDS. The Pilot Commercial Fund (PCF) would finance infrastructure for each of ALEDAs six greenfield sites and generate commercial activity to create wealth for the Traditional Owners and their respective communities. The PCF is modelled on agricultural operators operating at a commercial scale immediately.

The PCF would be delivered across a Pilot Phase (1–5 years) and a Second Phase (6–25 years) which coordinate progressive development of all six greenfield sites. During the Pilot Phase, a Land and Opportunities Portfolio will be populated with a suite of multi-industry investment-ready projects with Traditional Owners across the Northern Territory.

To achieve the PCF, ALEDA is seeking an investment partner to provide funding across these two phases:

- Pilot Phase: $28.5 million (deploy across two sites in years 1 and 2); and
- Second Phase: $38.7 million (deploy across four sites from year 3, contingent on a successful rollout of the pilot).

To date, ALEDA has secured sufficient water licences to irrigate all six greenfield projects. Further water may be made available through accessing the SAWR set aside for Traditional Owner purposes within the Central Plains region of the Western Davenport Water Control District.

Critical to ALEDA's future success is that all developments commence with co-mapping and have a WEPP operating concurrently with commercial developments of Country underpinned by the development framework previously mentioned.

Financial forecasts and profitability

ALEDA has prepared financial forecasts for its six greenfield projects. The information is based on thorough and extensive discussions held with project operators and key stakeholders to assist with determining key assumptions to apply to its economic modelling, and acknowledging risks which may impact on the performance of the PCF.

The six projects are estimated to initially generate only $550 per ha per year and forecast to increase significantly over the five-year Pilot Phase from about $20,000 to $598,000 per year. It is also stated that over $1 million will be distributed to the Traditional Owners over the Pilot Phase, over $8 million paid to the Traditional Owners if only phase one is completed over the life of the PCF, and over $25.5 million if only the Second Phase is completed over the life of the PCF.

Using the information and data ALEDA used in their financial forecasting, NPVs were estimated for different scenarios. Here the scenario accounts for total rental income from different projects, capital costs on these projects to build any required infrastructure cost and yearly total variable and operating costs. Considering a planning horizon of 25 years and using a discount rate of 5%, NPV is estimated at $75,915 over 25 years and about $3,000 per year. Though this is not remarkably high, it is still positive and provides associated benefits in terms of capability building and employment along with health and wellbeing outcomes that justify Traditional Owners investing in horticultural development on their land.

Community Benefit

The DSF case study demonstrates that it is possible to establish a commercially viable agricultural enterprise on the Indigenous estate. In this case, it is on communally owned Aboriginal land in the Northern Territory which has a unique system for ownership and management of the land designed to ensure that decision making rests with the Traditional Owners.

The agricultural development has benefited people's health and wellbeing due to the provision of fresh produce, employment opportunities and participation in the regional economy. Further, the business venture has improved food security and food sovereignty relevant to the small remote community of Alekarenge.

However, this case study also demonstrates that it is a complex undertaking that takes a considerable amount of time to develop and has significant costs and risks.

Without Centrefarm, the DSF could have neither been established nor been successful for any party. Traditional Owners and Ali Curung residents, still strongly committed to traditional Aboriginal culture and priorities, combined with a harsh colonial history, and living in a desert environment, could never have been expected to establish such a venture on their own. Centrefarm's development model not only supports Traditional Owners but also benefits independent operators like AFM.

Government support, in this case through the Commonwealth's ABA, has also been vital to establishing DSF. There is no evidence that Traditional Owners could have secured traditional private capital investment to enable the DSF to be developed, particularly the bore field. AFM has made a much bigger capital outlay for the operational infrastructure on the lease itself and the farm could not have succeeded without it.

Traditional Owners and residents are benefiting from the project in a tangible way, particularly through annual rental payments from AFM. It has also enabled the Alekarenge WEPP to be set up which is providing agricultural skills and saleable produce such as pumpkins in an Aboriginal-led environment. There are also intangible benefits including building their governance capacity and capability with respect to economic development on their own land.

A consideration is the obvious necessity of being able to access a reliable water supply to support horticultural growth in the region. Although land within the region is suitable for agriculture, the land bank exceeds groundwater supplies necessary to support irrigated agriculture. The SAWR may provide future security if easily accessible through the Northern Territory water controller.

Indicators of success

In review, the case study demonstrates that:

- Subject to irrigation, arable land is plentiful.
- For the foreseeable future there is a sufficient water supply to support a viable market for horticulture produce, including accessing the SAWR.

- Mainstream long-term land tenure arrangements negotiated on communally owned Aboriginal land have provided a basis for a substantial commercial agricultural enterprise.
- The Aboriginal owned company, ALEDA, provides capability and capacity to successfully partner with Traditional Owners and commercial operators and other stakeholders on an ongoing basis.
- Partnering with independent operators has provided significant infrastructure investment in DSF, as well as training, and other capital returns directly to Traditional Owners.
- Investment provided by the Commonwealth in the form of grants for infrastructure and essential services for the DSF is at a low cost, which the private sector, particularly banks, could not provide.
- Centrefarm with limited government support has been able to establish a successful training strategy in the form of WEPP which may be able to be self-sufficient in the long term and provide a pathway to employment on DSF.
- The initial infrastructure investment of $8.76 million, 500 ha of land producing on average 8,000 tonnes of watermelon per year is currently returning on average $232,500 per year to AHPL or an equivalent of nearly $21 million over the 90-year lease for the benefit of Traditional Owners.
- Gross margins of DSF are favourable comparable to gross margins estimated in previous studies for both annual and perennial activities in the Murray Darling Basin.
- Projected net profit values show that expansion of the farm would be profitable and a worthwhile investment.
- The agricultural development has provided other benefits including to people's health and wellbeing due to the provision of fresh produce, employment opportunities and participation in the regional economy and food security.

Cattle production in the West Kimberley region of Western Australia

Acknowledgements

ANU pays respects to the Traditional Owners, the Yawuru nation, and residents of the lands and waters in and around Rubibi (the town of Broome) from Bangarangara to the yalimban (south) to Wirrjinmirr (Willie Creek) to the guniyan (north), and banu (east) covering the Roebuck Plains and Thangoo pastoral leases in the Kimberley region north west of Western Australia. ANU also acknowledges the invaluable contributions of the case study partners, the Yawuru Prescribed Body Corporate, its operating company, Nyamba Buru Yawuru Limited and Yawuru Holdings Company Pty Ltd.

Brief Overview

Roebuck Plains Station (the Station) is a successful beef cattle breeding and growing enterprise situated in the West Kimberley region of Western Australia (see Image 5). The Station covers 275,540 ha and can support up to 16,000 head of cattle. It is also covered by a native title determination by the Federal Court that, in 2006, granted the Yawuru nation rights of exclusive possession.

Today, the pastoral lease for the Station is held by Nyamba Buru Yawuru Limited (NBY), a development and investment not-for-profit company. NBY was established by the Yawuru (native title) PBC, known as the Yawuru Native Title Holders Aboriginal Corporation, to manage the native title interests of the Yawuru nation.

The Station is strategically located for the export market, close to Broome, the largest town in the Kimberley. The Roebuck Export Depot (Depot) is adjacent to the Station and is also owned by NBY.

The ILSC has played a pivotal role in the success of this regional agricultural enterprise, originally purchasing the Station in 1999 and established the Depot in 2004, to develop both as commercial businesses to be divested to the Yawuru nation.

Image 5 – Brahman cattle on Roebuck Plains Station (source: CBRE 2017, p. 22)

Regional Background

Location

The Station is located about 30 km east of Broome in the West Kimberley region of northern Western Australia (refer to Map 3). According to Western Australia's Department of Primary Industries and Regional Development (DPIRD), the Kimberley region has some of the largest pastoral stations and herd sizes due to its relatively reliable rainfall and sustainable native pastures[9]. There are 93 stations in the Kimberley, 29 of which are owned by First Nations. Four of those have come together (Mt Anderson, Myroodah, Frazier Downs and Bohemia Downs) to form the Kimberley Agriculture and Pastoral Company (KAPCO) to take advantage of the economies of

[9] DPIRD Agriculture and Food. The Western Australian beef industry, issued 17 November 2021. Retrieved from: https://www.agric.wa.gov.au/export-services/western-australian-beef-industry

scale offered from an integrated pastoral enterprise and provide an avenue for First Nations people to gain training, skills and employment on country[10]. Its creation is a sign of the increasing economic importance of the pastoral industry to First Nations.

Apart from being renowned for its beef production, the Kimberley is also an important part of Australia's Indigenous estate. About 93% of the land mass of the Kimberley is the subject of native title determinations by the Federal Court of Australia and there are some 100 Aboriginal communities spread across it.

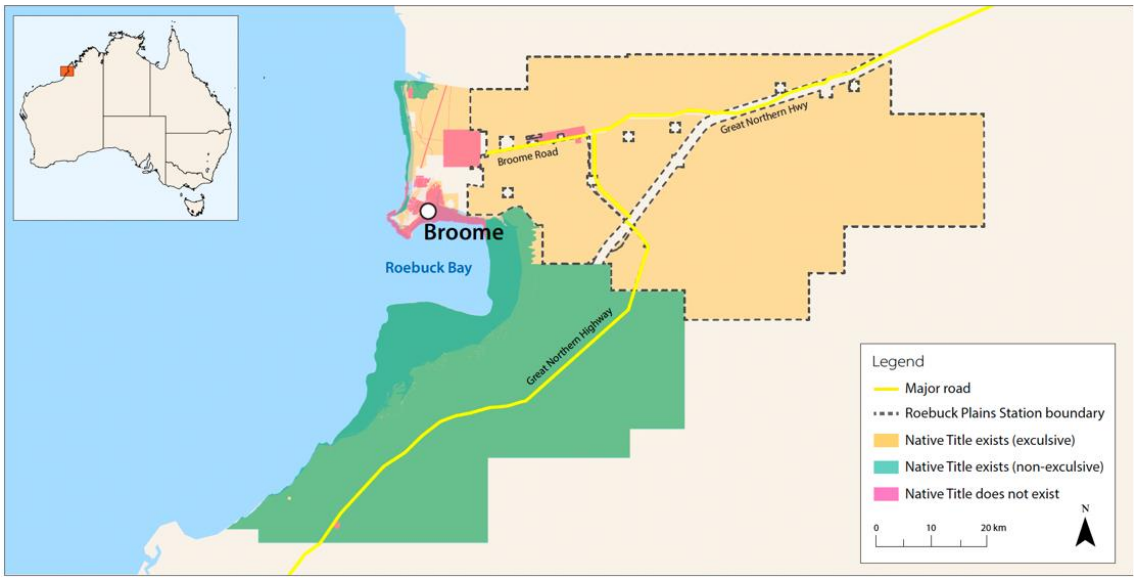
The Kimberley Land Council (KLC) is a Native Title Representative Body established by the Kimberley Traditional Owners in 1978. The KLC

> *…is working with Traditional Owner groups to navigate the shift in native title, to the post-determination environment where we hope to work with Aboriginal groups to establish corporations and enterprises that will empower Kimberley Indigenous people to take control of their own lives and build strong futures for their children* [11].

Broome (Rubibi in Yawuru language) is the largest town in the Kimberley. It is situated on a peninsular located over 1,600 km north of Perth and nearly 1,900 km west of Darwin. Broome supports a range of community services, accessible via a sealed road, including schools, multiple sport and recreation facilities and an international airport that enables access to its primary pearling and tourism industries. Broome also has a port which is the biggest deep-water access port servicing the Kimberley and supports livestock export, offshore oil and gas operations, pearling, fishing, tourism and is the main fuel and container receiving point for the region.

[10] Kimberley Agriculture and Pastoral Company overview. Retrieved from: https://www.kapco.com.au/#overview

[11] Kimberley Land Council Native Title Overview. Retrieved from: https://www.klc.org.au/native-title-overview



Map 3 – Native title determination areas including the Roebuck Plains Station lease area and its location in conjunction with Broome Township (source: Normyle et al. 2022, p. 34)

Colonial History

The land of the Yawuru nation was valuable to colonialists and the Yawuru's experience of the invasion, still to be fully told, was brutal and debilitating. Pastoralism was introduced to the region in 1864, in the same decade that international pearlers established their trade at Roebuck Bay and in surrounding areas (NBY 2014). Shortly thereafter Broome was gazetted as a town in 1883 when it became the pearling capital of the world during the 1880s.

Pastoral leases were first issued in the Kimberley by the Western Australia colony in the early 1880s, and by 1905, had covered its 'length and breadth' (Owen 2016). The effect of the pastoral industry on Aboriginal people, including the Yawuru, was profound and enduring. Dr Chris Owen, an expert in Western Australian history and native title, found that wanton violence perpetrated by non-indigenous settlers in the Kimberley throughout the late 19th century through to the mid-20th century facilitated not only the dispossession of Aboriginal people from their country but also decades of control over Aboriginal people as the source of labour. He also found that the work Aboriginal people did both on stations and as prisoners incarcerated in jails across the region, was foundational to the establishment of the pastoral industry.

The Station was originally acquired and developed by a pearling company to supply cattle and sheep meat to Broome. In 1953, the property changed ownership and, at the time, was stocked with about 10,000 head of cattle. In 1999, the ILSC purchased the property and in 2006, the Federal Court determined the Yawuru's native title claim

including exclusive possession over Roebuck Plains. The objective of Yawuru's claim was to have a secure basis for income generation and to limit the influence of the state in the management of their affairs (Yu 2021). In 2014, the ILSC divested the pastoral lease back to NBY which in turn subleased management of the Station to ILSC until February 2022, when the cattle business was also transferred to NBY.

Demographics

Broome and surrounds are the traditional land and waters of the Yawuru nation. In 2016, the population of Broome was around 14,000[12]. Half of the population in the Kimberley region identify as Aboriginal or Torres Strait Islanders, yet they make up only 3% of Broome's population with a median age of 25 years. Currently, 1,312 Yawuru people over the age of 18 are registered members of the Yawuru PBC with the majority of whom are living in Broome (NBY 2018).

Geography and Climate

Roebuck Plains has a hot semi-arid climate characterized by two seasons, the dry (April to November) with an average maximum temperature of 30ºC, and the wet (December to March) with an average maximum temperature of 35ºC. Annual rainfall averages about 620 mm of which about 84% is during the wet (see Image 6) [13].

Occasional cyclonic activity during the wet season can impact the region. A cyclone in 2018 caused significant flooding of the Station, forcing cattle to be moved and extensively damaged the property, including to buildings and fencing.

As shown in Table 2, the total land area of the Station is 275,540 ha. The land is predominantly sandy savannah woodlands (Pindan land type) with low gravelly hills on the east side (CBRE 2017). Associated with Deep Creek in the central portion are alluvial frontage forests that drain into an extensive open and heavily grassed floodplain in the western section, near the Roebuck Bay shoreline.

Table 2 – Land types and total area (source: CBRE 2017, p. 12)

[12] Australian Bureau of Statistics Broome 2016 Census Quickstats. Retrieved from: https://www.abs.gov.au/census/find-census-data/quickstats/2016/5002

[13] Australian Government Bureau of Meteorology Climate statistics for Broome Airport. Retrieved from: http://www.bom.gov.au/climate/averages/tables/cw_003003.shtml

Land Types	Approximate Area	Proportion
Floodplains	41,500 ha	15%
Pindan and savannah with seasonal flooded water courses	84,900 ha	31%
Pindan and gravelly spinifex low ridges	149,140 ha	54%
Total:	275,540 ha	100%*

The floodplain contains several different types of wetland, including seasonally flooded grassland, permanent freshwater lakes and seasonal or intermittent freshwater lakes and marshes (Smolinski, Galloway & Laycock 2016). About 15% of the property comprises marine plains which are subject to wet season inundation once every five to ten years, and the large Lake Eda has relative permanence (CBRE 2017; Smolinski, Galloway & Laycock 2016).

Soils in the region are characterised as Pindan soils that have high to fair capability for irrigated agriculture (CBRE 2017; Smolinski, Galloway & Laycock 2016).

Image 6 – Mustering on the Roebuck Plains Station floodplain area (source: Peter Ritter ©)

Water resources

The Broome region has a very high supply of good quality water compared to other regions in Western Australia. Management of water for some of Roebuck Plains is provided by the Western Australian Government's Department of Water and Environmental Regulation through the La Grange Groundwater Allocation Plan that

was declared in 2010 (DoW 2010a). The management plan accounts for only a portion of the Station lease area. There is no water allocation plan for the rest of the Station and no allocation plan for surface water in the Broome region.

The Kimberley region is also an important part of the ongoing Northern Development Agenda which provides a platform for the Western Australia, Northern Territory, Queensland and Commonwealth Governments to work closely on expanding the economic potential of Northern Australia[14]. This includes the Western Australia Government's Water for Growth Strategy (2014a) which identifies the Kimberley region, particularly the Fitzroy and Ord River catchments, as one of ten strategic growth regions.

Corporate and Governance Framework

Land Tenure: Pastoral lease, Native Title and Crown Land

Native Title

In acknowledging Yawuru's continuity of traditional laws and customs in the region, the Federal Court determined in 2006 that the Yawuru people are the native title holders of approximately 530,000 ha of their traditional lands in and around Broome[15]. Much of the land is determined as exclusive possession native title, while other parts, including the intertidal zones, are determined as non-exclusive native title (NBY 2014). The Station is an exclusive native title area (refer to Map 4). This is due to a beneficial provision in the *Native Title Act 1993* that applied in this instance.

The signing of the Yawuru native title Land Use Agreements with the Western Australian Government in 2010 marked the beginning of a new phase in Yawuru's autonomy (Yu 2021).

Roebuck Plains Station

The Station is held by NBY under a 50-year pastoral lease that is administered by the Western Australia Government's Department of Land under its *Land Administration Act 1997* (CBRE 2017). Pastoral leases apply to Crown land and give the lessee the right to use the land for grazing livestock. Over one third of Western Australia (2,532,974 km^2) is subject to pastoral leasing to about 435 pastoral properties. The Pastoral Lands

[14] Office of Northern Australia overview. Retrieved from: https://www.infrastructure.gov.au/territories-regions-cities/regional-australia/office-northern-australia

[15] National Native Title Tribunal native Title Determination Details, WCD2006/001 – Rubibi Community. Retrieved from: http://www.nntt.gov.au/SearchRegApps/NativeTitleClaims/Pages/Determination_details.aspx?NNTT_Fileno=WCD2006/001

Board is the statutory authority established under Section 94 of the 1997 Act. Together with the Minister for Lands, it administers pastoral leases in accordance with the Act. Under the Act, the lessee pays rent to the Western Australian Government.

Like all pastoral leases in Western Australia, the lease for Roebuck Plains only allows the holder, NBY, to graze authorised livestock on the natural vegetation.

Roebuck Export Depot

The Depot is also held by NBY as a special purpose lease for 21 years from 1999, with an additional optional term of 21 years that was taken by NBY. The property is outside the Town Planning Authority of Broome and requires Ministerial consent and an Authority Certificate from Traditional Owners for any development that impacts on sacred sites. The ILSC acquired the special purpose lease in 2004 to establish the Depot as an accredited commercial business with a capacity to prepare up to 12,000 head of cattle for export.

While ILSC's interest was transferred to NBY, the Depot is currently licenced to the ILSC to manage its operations. The ILSC and NBY agreed to transfer the licence as soon as possible and allow NBY to take over sole responsibility for managing the Depot.

Land Holding Entity: Nyamba Buru Yawuru Limited (NBY)

The Yawuru Native Title Holders Aboriginal Corporation (PBC) was incorporated in 2008 to manage and protect native title rights and interests for future generations (Yu 2021). Made up of 12 Directors (six are Yawuru nominated law bosses and six are elected members), it owns both Murra Mala Yawuru Pty Ltd, which is a holding company that allows the Yawuru PBC to create a separate business arm of the Corporate group, and the subsidiary not-for-profit development and investment company, Nyamba Buru Yawuru Ltd (refer to Figure 4) (NBY 2014, 2021).

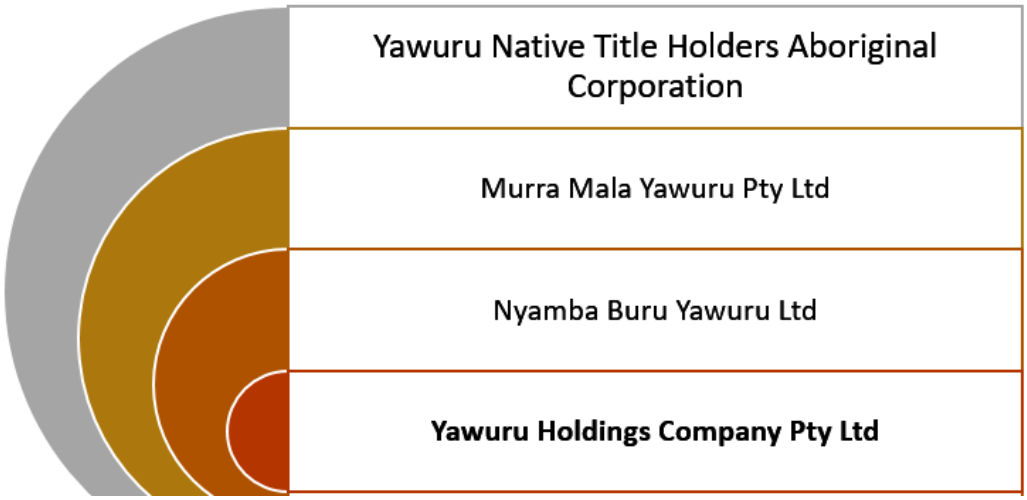


Figure 4 – Yawuru's governance model, adapted from its 2020 Annual report

NBY generates income from the activation of Yawuru capital assets that are assigned to it by the PBC. Through a board comprising seven members (two independent), NBY makes decisions about future development and business that generates sustainable income and sustains the integrity of native title (Yu 2021). It employs about 70 staff, including Directors, of which approximately 70% identify as Yawuru (see Image 7).

In addition to holding Yawuru's land assets, NBY executes Yawuru's strategic plan which is delivered through a range of programs and services to support the interests of the Yawuru community. NBY Corporate Group Strategic Plan 2016 - 2020 integrates through its activities, community, country and culture: 'Making *Mabu Liyan* real for all, always' (NBY 2016). The overarching mission of the plan is to improve health, housing and education through practical economic and social investments. One of those realised investments is taking over full operational responsibility for the running of the Station.

Business Entity: Indigenous Land and Sea Corporation and Yawuru Holdings Company Pty Ltd

Indigenous Land and Sea Corporation

The ILSC is a corporate Commonwealth entity established under the *Aboriginal and Torres Strait Islander Act 2005*. It assists Aboriginal and Torres Strait Islander people to realise economic, social, cultural and environmental benefits that the ownership and management of land, water and water related rights can bring. Assistance includes the acquisition and management of rights and interests in land, salt water and fresh water country.

After purchasing the Station in 1999 through its subsidiary National Indigenous Pastoral Enterprises Pty Ltd, the ILSC agreed in 2014 to divest ownership of both the pastoral and Depot leases to NBY. In turn, NBY sub-leased them back to the ILSC to manage while the Yawuru built their capability to take over their management. Under the subleasing arrangement, ILSC paid rent and met domestic stock and water, rates and utility charges, as well as stocked and stewarded quality marketable cattle on the property. NBY met charges for council rates and insurance premiums related to buildings and improvements.

According to the 2014 press release, the land package was collectively valued more than $15 million[16]. The transfer of the properties (Station and Depot) involved an ongoing partnership between Yawuru and the ILSC with respect to:

- The subleasing of the cattle operations to the ILSC for 15 years;
- Income security to Yawuru through commercial rent of land for cattle production;
- A discrete lease arrangement for the export cattle yards facility (Depot);
- Financial support for Yawuru to manage ecologically and culturally significant areas of Roebuck Plains through an Indigenous Protected Area (IPA); and
- Processes for agreement over Yawuru use of Roebuck Plains for Yawuru cultural and ecological management, tourism and horticulture activities.

NBY's subleasing arrangement with the ILSC, which ceased 1 February 2022, has successfully supported NBY to build the capability of the Yawuru to take full responsibility in managing these facilities going forward (NBY 2014, 2021).

In a press release, the ILSC Group CEO, Joe Morrison said the transition of operations was a significant step forward for the Traditional Owners and for the ILSC, and particularly that "the ILSC and NBY have worked hand in hand over the past six years to ensure Roebuck is a viable business, and we are proud to have supported the Traditional Owners as they prepare to take over running the station"[17]. The commercial arrangements included NBY purchasing 15,000 head of cattle from the ILSC to stock the Station.

Yawuru Holdings Company

The Yawuru PBC also owns the Yawuru Holdings Company Pty Ltd (YHC) which was established by NBY in 2017. YHC has taken over the business operations of the

[16] Yawuru native title holders celebrate the return of country. Press release issued 02 Sep 2014. Retrieved from: https://www.ilsc.gov.au/home/news/yawuru-native-title-holders-celebrate-the-return-of-country/

[17] Yawuru Traditional Owners take the reins at Roebuck Plains station. Issued 01 Feb 2022: https://www.ilsc.gov.au/home/news/yawuru-traditional-owners-take-the-reins-at-roebuck-plains-station/

Station from the ILSC with support from NBY, and will take over the business operations of the Depot as soon as possible.

Image 7 – Nyamba Buru Yawuru Ltd CEO, Ninielia Mills (second in from the right) and Yawuru Board Directors (source: © Michael Jalaru Torres 2022)

Development Framework

Sustainable Futures Policy

Development of agricultural industries is a key focal area of the NBY's roadmap for Yawuru sustainable futures (NBY 2018). Agriculture is the largest contributor to Gross Regional Product (GRP) and the fastest growing industry sector. The GRP of Broome in 2016 was valued at $1.06 billion which is about a quarter of the regional economy for the Kimberley, to which agriculture contributed nearly $616 million (gross value production at 2012). Over previous years, agricultural industries have maintained a trend of increasing their contribution to GRP. It is in these contexts that the Yawuru view agriculture as a long-term stable opportunity to provide benefits to the community.

Training

In the past, the ILSC has delivered training programs on the Station in collaboration with NBY. The ILSC training program ceased upon transfer of the operations at which time NBY has continued the successful delivery of its own training program.

NBY's externally funded Warrmijala Murrgurlayi (Rise up to Work) program and Employment and Training sector focus on pastoral industry training with the aim to create a pipeline of candidates with the necessary skills to support the operations at the Station[18].

In 2021, seven participants of the agriculture training graduated from the Low Stress Stock Handling course held at the Station and transitioned into employment. Six of those gained sustainable employment at the Station (refer to Figure 5).

Figure 5 – Agriculture training outcomes for the 2020 - 21 reporting period (source: NBY 2021, p. 23)

Currently, NBY is collaborating with the Kimberley Pilbara Cattlemen's Association and DPIRD to explore ways to enhance delivery and participation of pastoral industry training, and to explore the feasibility of a Pastoral Academy at the Station.

Mabu Liyan

In line with *mabu liyan*, NBY's Futures Policy 2018 sets out the cultural framework for sustainable development, including its cattle business (refer to Figure 6).

> *Mabu liyan is what gives meaning to people's lives. Yawuru people's connection to country and joy celebrating in our culture and society is fundamental to having*

[18] Warrmijala Murrgurlayi – Rise up to Work Employment Program overview. Retrieved from: http://www.yawuru.org.au/wp-content/uploads/2019/04/Warrmijala-Murrgurlayi-Program-Overview.pdf

good liyan. When our liyan is good, our wellbeing and everything else is in a good space.

Patrick Dodson, Yawuru Elder (NBY 2021, p. 20).

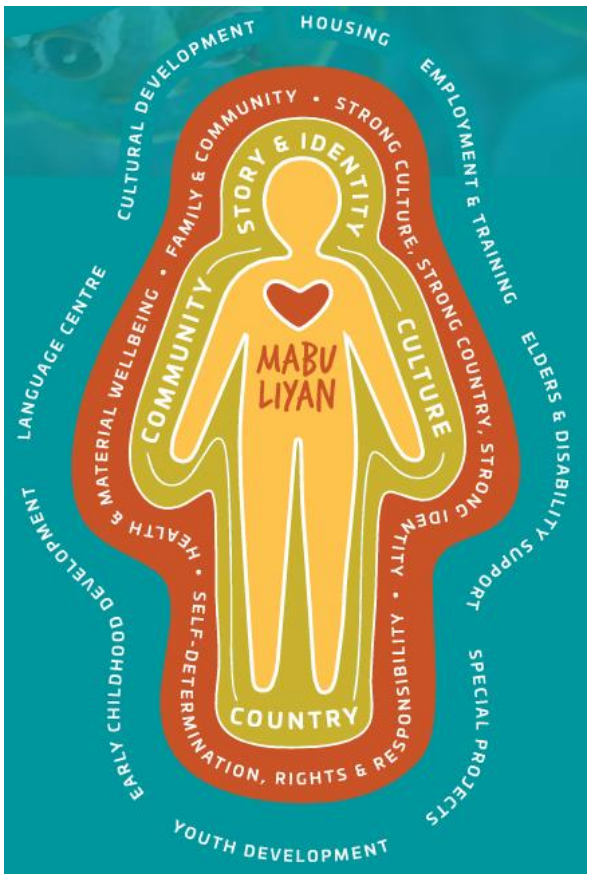


Figure 6 – NBY Development model (source: NBY 2021, p. 20)

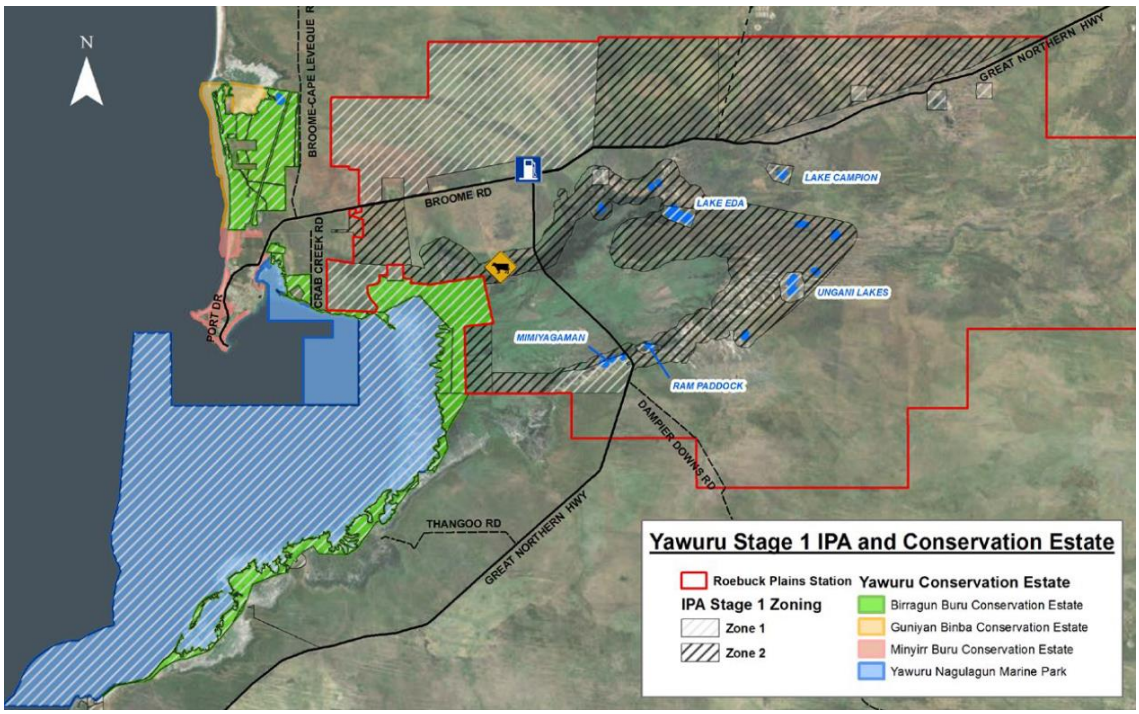
Healthy Country

The Station is a valuable and unique Yawuru asset representing Yawuru's natural capital of soil, water and ecosystems. Significant springs and wetland systems exist across the Station including an internationally registered Ramsar Wetland which sits across the intertidal zone adjacent to the Station. NBY's Environmental Services Unit (ESU) aims to build baseline data and knowledge about these critical elements to facilitate holistic management of the station and the adjoining Nagulagun Roebuck Bay Marine Park. As one Yawuru Country Manager states, "what happens on the hinterland will have an impact on the health of Roebuck Bay".

NBY's ESU has a comprehensive cultural and environmental management program on the Station with an IPA over areas of significance on the station. IPAs are a part of the

National Reserve System to protect biodiversity[19,20]. Their management combines traditional and contemporary knowledge under a management framework that engages partnerships among conservation and commercial organisations.

Declared in 2009, the Yawuru IPA covers an area of nearly 200,000 ha of land and sea (NBY 2014, 2021). The vision of the IPA is *mabu liyan*, *mabu buru, mabu ngarrungunil* (good feeling, healthy country, strong community) and provides a framework for native title holders to maintain customary practices with respect to their active participation in looking after their country alongside economic activities (NBY 2014) (refer to Map 4).



Map 4 – Map showing Yawuru's Indigenous Protected Area overlapping Roebuck Plains Station (source: NBY 2021, p. 31)

The IPA Plan of Management was negotiated with the ILSC over ten years ago. The plan identifies zones for the protection of significant cultural and ecological values. The Zone 1 Category 4 areas (the protection of habitat as set by the International Union for Conservation of Nature (IUCN)) are identified for cattle exclusion (NBY 2021). Zone 1 Category 6 IUCN areas (for sustainable management of areas of significant natural resources e.g. soil, water and biodiversity) are identified for rotational grazing and adaptive management and monitoring. Zone 2 Category 6 IUCN area is to provide

[19] Commonwealth National Indigenous Australians Agency, Indigenous Protected Areas (IPAs) overview. Retrieved from: https://www.niaa.gov.au/indigenous-affairs/environment/indigenous-protected-areas-ipas

[20] Commonwealth Department of Agriculture, Water and the Environment, Natural Reserve System. Retrieved from: https://www.awe.gov.au/agriculture-land/land/nrs

linkage between the other zones and the pastoral lands and subject to monitoring under specific projects.

In 2015, the ESU also worked in collaboration with the ILSC and Station management, facilitated by pastoral consultants, to produce the Station's Ecological Sustainable Rangelands Management (ESRM) Plan. The ESRM Plan is a requirement under the pastoral lease conditions. It considers, among other things, land systems and condition, climate, livestock rangelands, drainage, pests and obligations for monitoring under lease conditions as well as the ecological and cultural values and threats of importance to Yawuru people. The ESRM Plan and IPA Plan of Management have together been informative documents for ESU's cultural and environmental program in contributing to the sustainable management of the Station. The ESRM Plan was funded by Rangelands NRM, a natural resource management (NRM) not-for-profit organisation working with land managers across Western Australia[21].

NBY's ESU has developed a number of monitoring projects which will provide baseline data over time to inform adaptive holistic management of natural assets including biodiversity, ground and surface water, and the impact of cattle grazing on soil, water and ecosystem health (refer to Figure 7). The geospatial mapping technology provides land-use decision making tools that help protect culturally and ecologically significant wetlands and pastoral lands (Yu 2021).

[21] Rangelands NRM overview. Retrieved from: https://rangelandswa.com.au/

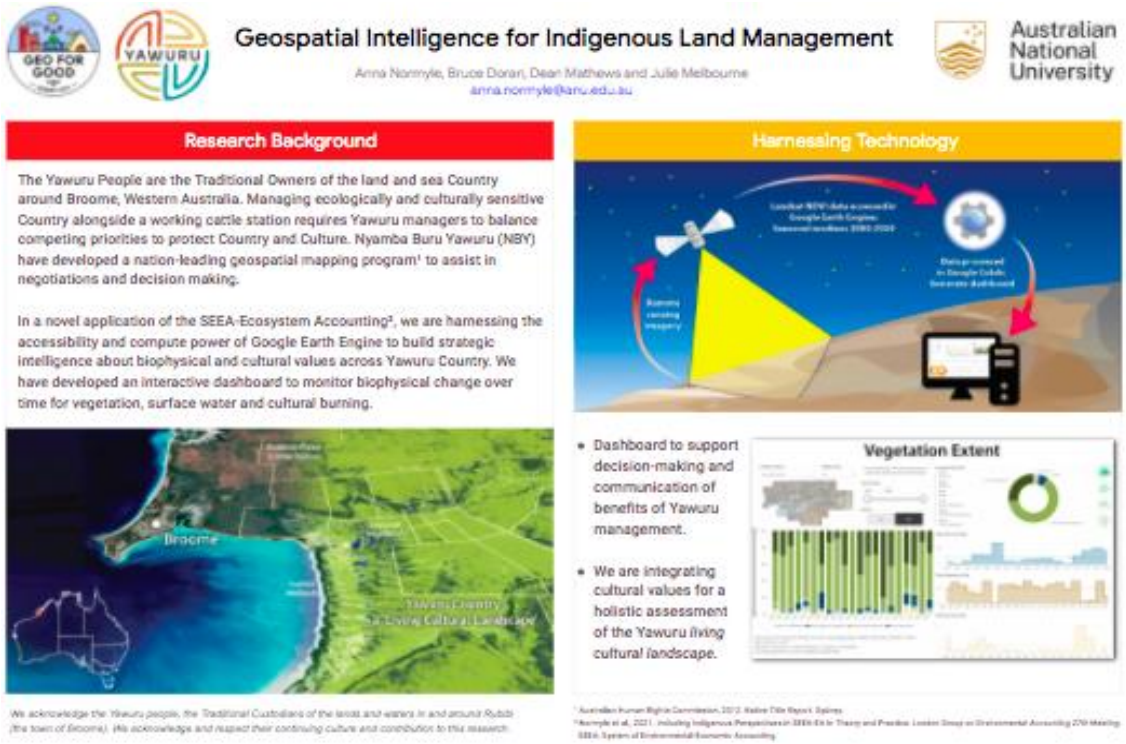


Figure 7 – Summary of geospatial intelligence for Indigenous land management (source: Normyle et al. 2022)

Business Framework: Roebuck Plains Station

Market background

The Kimberley is known for its high quality, clean meat. The Station is viewed as a high value pastoral property strategically located close to the Broome Port which gives it the potential to play a pivotal role in the future integrated development of the Kimberley region's beef industry for both live cattle (predominantly Brahman) and boxed beef export (CBRE 2017; NBY 2018).

Broome's port supports live cattle export facilities (the Depot) and is the headquarters for many beef sector support industries including the Kimberley Meat Company[22] which supplies beef products nationally and internationally.

Infrastructure

Station

[22] Kimberley Meat Company overview. Retrieved from: https://www.kimberleymeat.com.au/

The Station paddocks are within 28 km of the cattle yards and a further seven km to the Depot (CBRE 2017). Roads to the homestead and four main cattle yards have all-weather road train access.

The Station, in general, has a large homestead, including staff accommodation and dwellings, multiple equipment, work and storage sheds, six permanent steel cattle yards, horse stables and yards and a fenced boundary (see Image 8). It is subdivided into approximately 25 main paddocks that are interconnected with access roads to the cattle yards and Depot.

The Station uses groundwater and rainwater catchment supplies and 58 bores that supply several artificial water points (CBRE 2017). Water access to ground water for stock is granted free by the Western Australia Government.

NBY has a 3 gigalitres (GL) water licence related to 420 ha off Dampier Downs Road. NBY is legally required to comply with conditions related to monitoring the licence quarterly. To date, no development has occurred.

In general, the station runs at low cost compared to other cattle properties in northern Australia (CBRE 2017).

Roebuck Export Depot

The Depot is in a prime location, only a short distance to the Broome port and has direct links to the Station's cattle yards. The Depot has no direct competing feed lots or export depots in the region and; therefore, has a monopoly in the market (Integrated Valuation Services 2018). Further, staffing the facility is easier given its close proximity to Broome.

The property comprises a well-developed depot with a yard facility of about 100 ha and is licensed to hold 17,444 cattle, up to 300 kg each (Integrated Valuation Services 2018). The property includes facilities, demountable office, weighbridge, workers quarters, feed commodities shed and workshop.

As mentioned earlier, the Depot is currently sublicensed to ILSC and includes ancillary licences to take 150 ML of metered water via bores.

Staffing

The Station has three permanent staff members; a Station Manager, Station Administration Manager and an Assistant Manager (Aboriginal). Station policy is to preference Aboriginal staff where possible. It also employs around 18 casuals during the annual mustering season.

Financial Analysis and Profitability

Station

In terms of its productivity, the Station can carry about 16,000 head of adult cattle which, in 2017, CBRE valued at $900 per head and a total value of about $14.4 million. CBRE also determined the land area value, including infrastructure, for the Station was between $50 and $55 per ha or a total value of about $14.4 million based on a comparative analysis with similar properties. This assumes a total value of property in 2017, including assets and cattle, of about $28.8 million.

CBRE's 2017 assessment of market rental value of the Station including plant, stock and equipment was estimated to be $560,000 per year. The original lease rent paid to NBY by the ILSC was $340,000 per year, and has increased to $575,000 per year.

These values are considerably greater than when ILSC purchased the lease in 1999. The ILSC purchased the Station lease, infrastructure, plant and equipment, and cattle for about $8 million, subject to any adjustments for cattle numbers and paid $340,000 per year rent to NBY until 2018 (CBRE 2017). Land value and assets at 2017 were almost four times that paid by ILSC and rent value at 2017 was 60% higher than the lease terms.

In terms of financial viability, Table 3 shows the number of cattle, cattle sold and average price of beef ($/kg) each year over four years from 2018 to 2021, inclusive. As the weight of each head of cattle and the selling price were unclear, data on the beef weight per head of cattle was used from the McLean et al. (2018) report, Pastoral Company Benchmarking Project 2012–2017. According to that report, the average weight of beef was 95 kg per head. Using this weight, the total beef production was multiplied by the average beef price to give an estimate of the total gross value and gross margin per head. Using these values, the estimated total gross margin of the Station was $243,507 ($76 x 3,200), $414,138 ($83 x 5,000), $276,872 ($64 x 4,300) and $531,033 ($111 x 4,800) for the four years from 2018 to 2021, respectively. These estimates are not far from the annual rent ILSC paid to NBY when it purchased the Station in 2017.

Unfortunately, no direct cost data for the Station was available for this study, including for operations, to determine the Station's actual financial viability and profitability. However, a comparison of the costs and benefit figures provided in McLean et al.'s (2018) report with both calculated and estimated gross values indicates that the above estimated per head gross values were higher in 2018, 2019, 2020 and 2021 by 25%, 36%, 6% and 81%, respectively. Assuming costs would have increased by the same

level, for consistency, total enterprise operating expense increases per head are given (i.e. $137 to $171, $186, $145 and $248 for 2018, 2019, 2020 and 2021, respectively). Consequently, estimated gross margins vary from $64 per head in 2020 to $111 per head in 2021. These gross margins are close to the average operating profit and gross margin given in the McLean et al. (2018) report, i.e. $63 per head. McLean et al. (2018) reported the operating profitability of the top 25% of the farms with the focus only on growing (rather than breeding and growing) was $171 per head. Therefore, estimates of the four years are close to this value.

Table 3 – The number of cattle, cattle sold and the average price of beef $/kg each year over four years from 2018 to 2021, inclusive

Year	Total cattle	Cattle sold	Total beef kg	Beef price $/kg	Gross value $/farm	Gross value $/head	Gross margin $/head
2018	17,000	3,200	304,000	2.6	790,400	247	76
2019	18,000	5,000	475,000	2.83	1,344,250	269	83
2020	16,000	4,300	408,500	2.2	898,700	209	64
2021	16,000	4,800	456,000	3.78	1,723,680	359	111

In summary, the estimated gross margins between 2018 and 2021 indicate that the Station is financially viable and any further increase in beef price will increase its profitability while increased costs of production, including a higher rent rate, will have the opposite effect and reduce its profitability.

Roebuck Export Depot

Since the ILSC acquired the special purchase lease in 2004, it has invested close to $2 million to establish the Depot's commercial business. Integrated Valuation Services (2018) estimated its value at $5 million apportioned to land, building and yard infrastructure and estimated its rent potential at $200,000 per year. The value of the Depot is more than double ILSC's original investment.

Financial data with respect to the operations and profitability of the Depot has not been made available for this study. However, it is understood that the Depot is profitable.

Image 8 – Cattle yards at Roebuck Plains Station (source: © Michael Jalaru Torres 2021)

Future directions

For Yawuru people, looking after Country is important for protecting and exercising their cultural and native title rights and to further their economic development opportunities (Yu 2021). Yawuru are working to become an active participant in the development of regional and national economies.

The Station is viewed as providing employment and economic opportunities beyond cattle production.

> *There is potential to lead an integrated regional beef strategy and leverage the Roebuck Export Depot Cattle Yards in the future. Other promising commercial opportunities for the station include cultural tourism, fodder production, tropical horticulture, aquiculture, and bush foods and medicines (Yu 2021, p. 245).*

In the meantime, NBY will be working over the next few years to support the business operations of the Station and the Depot. With the transfer of both the Station and Depot and other development projects, the Yawuru nation is well positioned to benefit from commercial income streams flowing from those projects and to move toward long-term financial self-sustainability (NBY 2021).

Any future developments will be underpinned by *mabu liyan* to reinforce and maximise Yawuru's cultural resilience and self-determination (Yu 2021).

Community Benefit

The strengths of the Station (significant area of land, yards, economies of scale, consistent climatic conditions, consistent terrain with few natural development impediments, proximity to Port of Broome and road access) give confidence and provide some security to Yawuru to secure a sustainable economic future from this part of their estate. Additionally, the current operation has real potential to expand with the development of the remainder of the property (Integrated Valuation Services 2018). Also, the Yawuru IPA over part of the Station, supports sustainable land management and grazing practices and protects cultural and ecological sites that provide significant benefit to Yawuru people's *mabu liyan*.

Indicators of success

The key success indicator of this case study has been the positive role of the ILSC in returning land and associated benefits back to Yawuru native title holders. ILSC's purchase of the property in 1999 and agreement to divest the property in 2014 has enabled the Yawuru to ultimately gain autonomy over a significant part of their traditional estate, the Station and eventually the Depot, for community benefit. The ILSC partnership with Yawuru in managing these enterprises in preparation of divestment in 2022 has been important for Yawuru to build their governance and management capability ready to takeover. An important achievement is that the Yawuru have taken over the management of the Station only eight years after the pastoral lease was divested by the ILSC to NBY, which is seven years less than the timeframe that was agreed to in 2014.

ILSC support also extended to assisting Yawuru in developing their IPA Plan of Management over a portion of the Station, which protects nationally significant cultural and conservation values, important to Yawuru *mabu liyan*.

In review, the case study demonstrates that:

- Agencies, such as the ILSC, can be pivotal in supporting First Nations to reacquiring their land and supporting their social, cultural and economic interests through the use of their estates.
- The determination of native title over the Station and Depot has not been detrimental to their commerciality.

- The determination of native title has motivated the Yawuru to establish good governance and drive their community development framework that is inclusive and balances their cultural, social and economic values and interests.
- The Yawuru PBC auxiliary business, NBY, has been essential to the Yawuru implementing their strategic interests by developing a governance and management model, forming a partnership with the ILSC, facilitating access to Government grants and other funding, and developing business partnerships.
- Yawuru's *mabu liyan* framework for integrating cultural, social and economic values and interests has contributed to NBY's success including enabling its business acumen to coincide with looking after Country and culture.
- The Yawuru IPA supports sustainable grazing practices alongside protection of natural and cultural assets and activities and the employment of skilled Indigenous Rangers.
- The Yawuru nation has become an active participant in the regional economy and associated development strategies.
- The Station is well positioned in the export market, and regionally with respect to limited competition and its proximity to the Kimberley Meat Company.
- The Station's land value and rent value, including infrastructure and cattle, has significantly increased over the last several years indicating it is a profitable capital asset.
- Agriculture is the largest contributor to GRP in the Kimberley and the financial productivity of the Station is positively contributing to GRP.
- The Yawuru have potential to further add to GRP through the development of their estate, including through its diversification into other primary industries.
- The Station is one of the few properties in the Kimberley that runs a training program which supports sustainable Indigenous employment in its operation.

DELTA DOWNS STATION AND KURTIJAR ABORIGINAL CORPORATION

Cattle production in Queensland's Gulf Country

Acknowledgements

ANU pays respects to the Traditional Owners and residents of the land, rivers and saltwater between the Norman and Staaten Rivers, including Normanton and Karumba townships, and extending about 100 km inland south east of the Gulf of Carpentaria in Queensland. ANU also acknowledges the invaluable contributions of the case study partners, Delta Downs Station and Morr Morr Pastoral Company owned by the Kurtijar Aboriginal Corporation.

Brief Overview

The Delta Downs Station (Station) is an aggregate of three adjoining pastoral lease properties in Queensland's Gulf Country, Delta Downs, Maggieville Outstation and Karumba Downs (McClelland Rural Services 2014). The aggregate covers approximately 405,000 ha and breeds and raises (up to two years) around 40,000–45,000 head of cattle primarily for re-stocking operations in the Central Highlands of Queensland (see Image 9).

The Station is operated by the Morr Morr Pastoral Company (MMPC) which holds the pastoral leases. MMPC is wholly owned by the not-for-profit Kurtijar Aboriginal Corporation (KAC). Its members, the Kurtijar people, are the Traditional Owners of the Station. The Station boasts the title of Australia's first cattle station run by Traditional Owners. It is also one of the largest Aboriginal-owned cattle stations in Queensland and has become the largest employer of Indigenous people on a single grazing property in Queensland's Gulf Country.

The Station is viewed by Kurtijar people as assisting them with the sustainable development of their Country for their economic, social, environmental and cultural benefit. The Station has generated significant profit over the last five years, averaging about $7.5 million per year. Benefits also include employment and training for local Indigenous people and annual payments made to KAC by MMPC of about $300,000 and donations between $20,000 and $30,000 directly to the Kurtijar community.

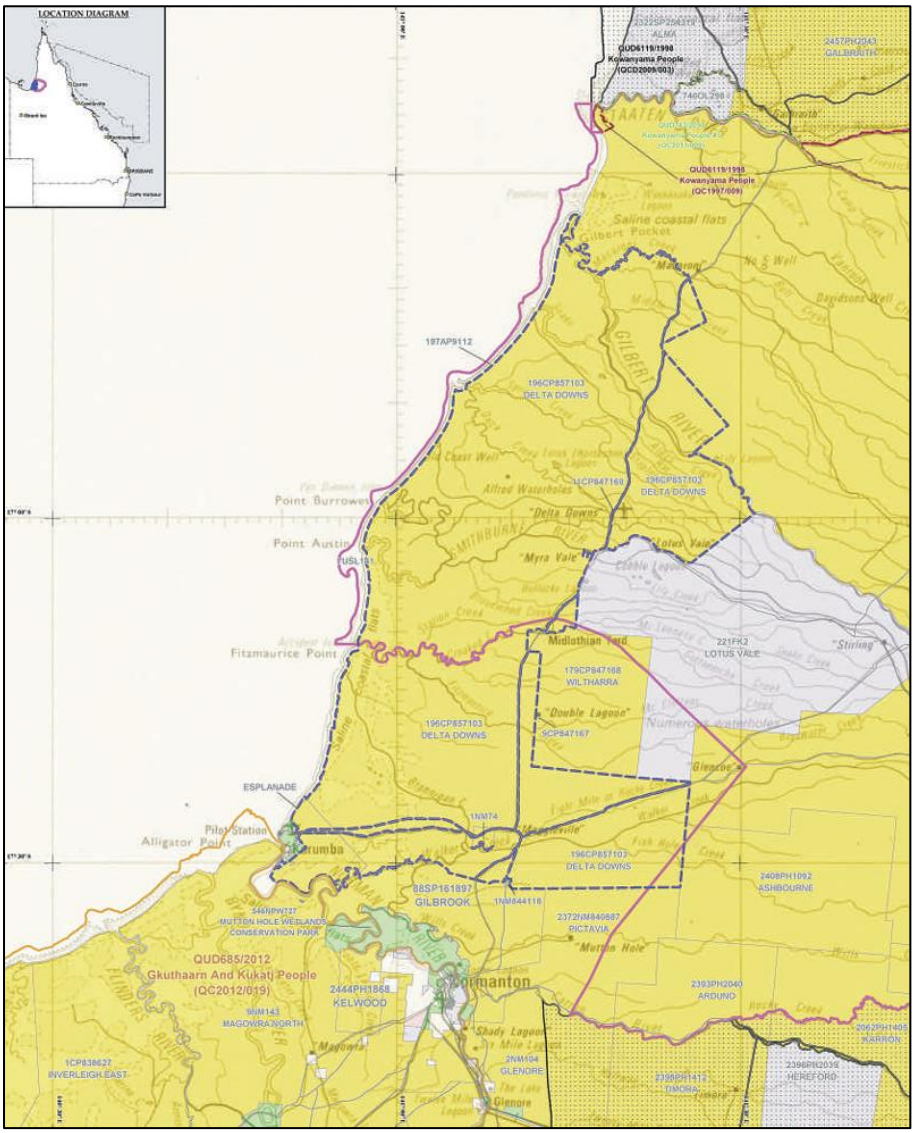
Commonwealth Government agencies, such as the former Aboriginal Development Commission, have played a pivotal role in the success of this regional agricultural enterprise, purchasing the property in 1983 and its successor, the Aboriginal and Torres Strait Islander Commission (ATSIC), transferring the leases and cattle to the Kurtijar people in 2002 to provide them with an economic base.

Image 9 – Mustering on Delta Downs Station (source: McClelland Rural Services 2014, p. 19)

Regional Background

Location

The Station is located within the Carpentaria Shire, south of the Gulf of Carpentaria in north-west Queensland. The western boundary of the property adjoins the town of Karumba, its southern boundary is along the Norman River 20 km north of Normanton, and Gilbert River provides the northern boundary (refer to Map 5). Normanton is the largest town in proximity to the Station and is the administrative and government centre for the Carpentaria Shire.



Map 5 – The Delta Downs Station area identified by the blue dashed line. The yellow areas indicate pastoral lease areas (source: Carpentaria Land Council Aboriginal Corporation 2014)

Colonial History

The Kurtijar Traditional Owners of the region have faced a history of atrocity, dispossession and marginalisation. However, the acquisition of the Delta Downs Station more recently is viewed by the Kurtijar people as their greatest achievement in their pastoral history with respect to gaining back autonomy over their traditional lands (Carpentaria Land Council Aboriginal Corporation 2014).

Normanton was gazetted in 1868 (Norman) when hydrographic surveys of the Gulf of Carpentaria and the Torres Straits were being undertaken to identify safe shipping

routes[23]. Later, in 1885, the population boomed when gold had been discovered in the region. The gold rush ended in 1900 and land in the region was distributed to pastoralists to develop the cattle industry. By 1950, interest in the region waned but saw a resurgence in the 1960s with industry development in the prawn fishery near Karumba. Today, the regional economy is chiefly attributed to the cattle industry.

Early colonial settlement is marked by Aboriginal people as 'nokot.nk', which means 'no good time' or 'shooting time' (Carpentaria Land Council Aboriginal Corporation 2014). By 1920, Aboriginal people were forcibly moved to missions on Mornington Island and at Doomadgee and some were moved to Aboriginal camps on the outskirts of towns, which were gazetted as Aboriginal reserves as early as 1935 and remained in existence as late as 1976. During the 1930s and 1940s some Aboriginal people were moved onto cattle stations, including Delta Downs, as indentured labourers who didn't receive equal pay until 1968. Kurtijar people remember the conditions of the camps as being awful, associated with suffering from diseases and malnutrition and even today, still talk about the massacres that occurred (Carpentaria Land Council Aboriginal Corporation 2014). As well as being deprived of access to their lands and hunting grounds, they were effectively excluded from the developing society in Normanton and other nearby towns, other than as forced labourers.

As pastoralism grew in the region, so did Kurtijar's connection to the industry to stay connected to their traditional lands and preserve their language and culture (Carpentaria Land Council Aboriginal Corporation 2014). The Station was established around 1889, and by 1895 was trading cattle owned by the London Bank of Australia (McClelland Rural Services 2014). By the 1970s the property was in poor condition and its business operations were disrupted by the national implementation of the Brucellosis and Tuberculosis Eradication Campaign.

It was through the determination of Mr Rolly Gilbert, a Kurtijar Elder, that the Station today provides a legacy for future generations (Carpentaria Land Council Aboriginal Corporation 2014). Gilbert with others lobbied for the Federal Government to acquire the land and return it to the Kurtijar people. In 1983, the Aboriginal Development Commission (subsequently absorbed into ATSIC) acquired the properties, Delta Downs and Maggieville Outstation and over 20,000 head of cattle for nearly $2 million. The intent was to transfer the leases and cattle to the Kurtijar people to provide them an

[23] Queensland Government Normanton. Retrieved from: https://www.qld.gov.au/firstnations/cultural-awareness-heritage-arts/community-histories/community-histories-n-p/community-histories-normanton

economic base. In the late 1990s, the adjoining Kuramba Pastoral Holdings Downs was also acquired.

MMPC was originally incorporated in 1912 but under the trading name, The Delta Pastoral Company Pty Ltd. The company has been operating under the trading name Morr Morr Pastoral Company Pty Ltd since 1983 when the properties were acquired by the Aboriginal Development Commission. In 1994, KAC was incorporated and between 2002 and 2003, ATSIC transferred the MMPC's shares to KAC. In 2002, the leases for the three stations were also transferred to MMPC.

Today, MMPC is one of the largest Aboriginal-owned pastoral companies in Queensland and the largest employer of Indigenous people on a single grazing property in Queensland's Gulf Country. It offers culturally appropriate training programs to improve the employment prospects of young Indigenous people. The Rural Industries Research and Development Corporation (RIRDC) and McClelland Rural Services valued the property in 2012 at $35 million. Today, the MMPC's total net assets are valued at about $55 million (KAC 2021).

Demographics

The majority of the Carpentaria Shire's population live in Normanton close to the Norman River. Normanton has a population of about 1,300 of whom 750 (60%) identify as Aboriginal and or Torres Strait Islander people[24]. Weekly income per household of Aboriginal people, which averages 3.6 people, is just over $1,300 (or $361 per person). The main employment industries, in descending order, are local government administration, education, cattle farming and medical services.

Geography and Climate

The Station has a tropical monsoonal climate with two distinct seasons, hot wet summers and cooler dry winters. The dry season extends from April to November and averages temperatures of 32^{o}C (max) and 19^{o}C (min) and 66 mm total rainfall. The wet season extending from December to March averages temperatures of 35^{o}C (max) and 25^{o}C (min) and 857 mm total rainfall[25].

The Station includes coastal dunes that are highly permeable and infertile; infertile sand plains that have limited water holding capacity; and flood plains (McClelland Rural

[24] Australian Bureau of Statistics Normanton 2016 Census QuickStats. Retrieved from: https://www.abs.gov.au/census/find-census-data/quickstats/2016/SSC32184

[25] Australian Government Bureau of Meteorology Climate statistics for Normanton. Retrieved from: http://www.bom.gov.au/climate/averages/tables/cw_029041.shtml

Services 2014). The flood plains are flat with mostly alluvial soils that are fertile and have a good capacity to retain soil moisture.

The vegetation on the Station is predominantly coolabah open woodlands, fringed by river red gum woodland and including north-west ghost gum, bloodwoods, bauhinia, broad-leaved carbeen and gutta percha (McClelland Rural Services 2014). The major pasture grass species of value include black spear grass, golden beard grass, forest bluegrass, silky browntop and giant spear grass. Invasive species such as kerosene grass and asbestos grass, grader grass and mission grass are rapidly spreading and degrading large areas of pasture.

Water resources

Two large catchments flow across Kurtijar Country and drain into the southern Gulf of Carpentaria, the Gilbert and Staaten drainage basins (see Image 10). The property can at times be affected by severe flooding due to the Norman and Gilbert Rivers and their offshoots flowing through the property. Parts of the coastal plain can be inundated by seawater during abnormally high tide events.

One significant impact on the region's infrastructure is the lack of water during the dry season, and floods during the wet season. During the wet season the main roads can become flooded, often blocking access for long periods of time. In contrast, during the dry, water becomes scarce.

Management of water in the region is provided by the Queensland Government's Department of Regional Development, Manufacturing and Water through the Water Plan (Great Artesian Basin and other regional aquifers) that was declared in 2017 (Queensland Government 2017). Water can be taken freely, for the purpose of watering stock, using a licensed bore. The Great Artesian Basin is the largest groundwater basin in Australia (22% of the continent) supporting at least $12.8 billion in economic activity annually[26]. There is no water management plan for surface water in the region.

[26] Australian Government Geoscience Australia, Great Artesian Basin. Retrieved from: https://www.ga.gov.au/scientific-topics/water/groundwater/gab

Image 10 – Lotus Lagoon at Delta Downs Station (source: Carpentaria Land Council Aboriginal Corporation 2014, p. 2)

Corporate and Governance Framework

Land Tenure: Pastoral leases

All three properties of the Station aggregate are held by long term pastoral leases issued by the Queensland Government (McClelland Rural Services 2014). The leases are for 40 years and are held by MMPC which runs the pastoral operations. MMPC pays about $60,000 to $65,000 lease rent per year to the Queensland Government.

Land Holding: Kurtijar Aboriginal Corporation (KAC)

KAC is a not-for-profit corporation registered under the Office of the Registrar of Indigenous Corporations (ORIC) (KAC 2021). ORIC is an independent statutory body that administrates the CATSI Act.

In August 2002, 49% of the shares in MMPC were transferred from ATSIC to KAC and in November 2003, the remaining 51% of the shares were also transferred to KAC. The transfer included about 20,000 head of cattle at no cost to KAC.

Through its elected Board, KAC represents the interests of 14 Kurtijar family groups.

The financial independence of KAC is dependent on receiving loan repayments, dividend income or donations from its subsidiary MMPC. MMPC pays around $300,000 annually to KAC.

Business entity: Morr Morr Pastoral Company Pty Ltd (MMPC)

MMPC is a subsidiary of KAC. The KAC Board elects ten members from the local Kurtijar community to make up the separate MMPC Board (refer to Figure 8). The MMPC Board meets every two months. The separation of the MMPC's board from KAC enables MMPC to focus solely on managing the profitability of the cattle business.

In addition to its Board, MMPC's governance includes an Executive Committee that consists of the Chairperson, Vice Chairperson, one non-executive Director and the Company Secretary. The purpose of the Executive Committee is to provide operational advice to the Station Manager. The Company Secretary position is filled by a professional accountant from a commercial accountancy firm based in Townsville who has developed a trusted relationship with the MMPC Board. Other outside expertise is sought as needed.

All business planning is carried out by the Board with the assistance of its Executive Committee (McClelland Rural Services 2014). MMPC's mission is to operate a highly profitable cattle business that provides employment for Indigenous people and produces financial and social dividends to the Kurtijar community. Business plans are for five years and their implementation is reviewed annually to evaluate progress and revise any changes to the operations of the business.

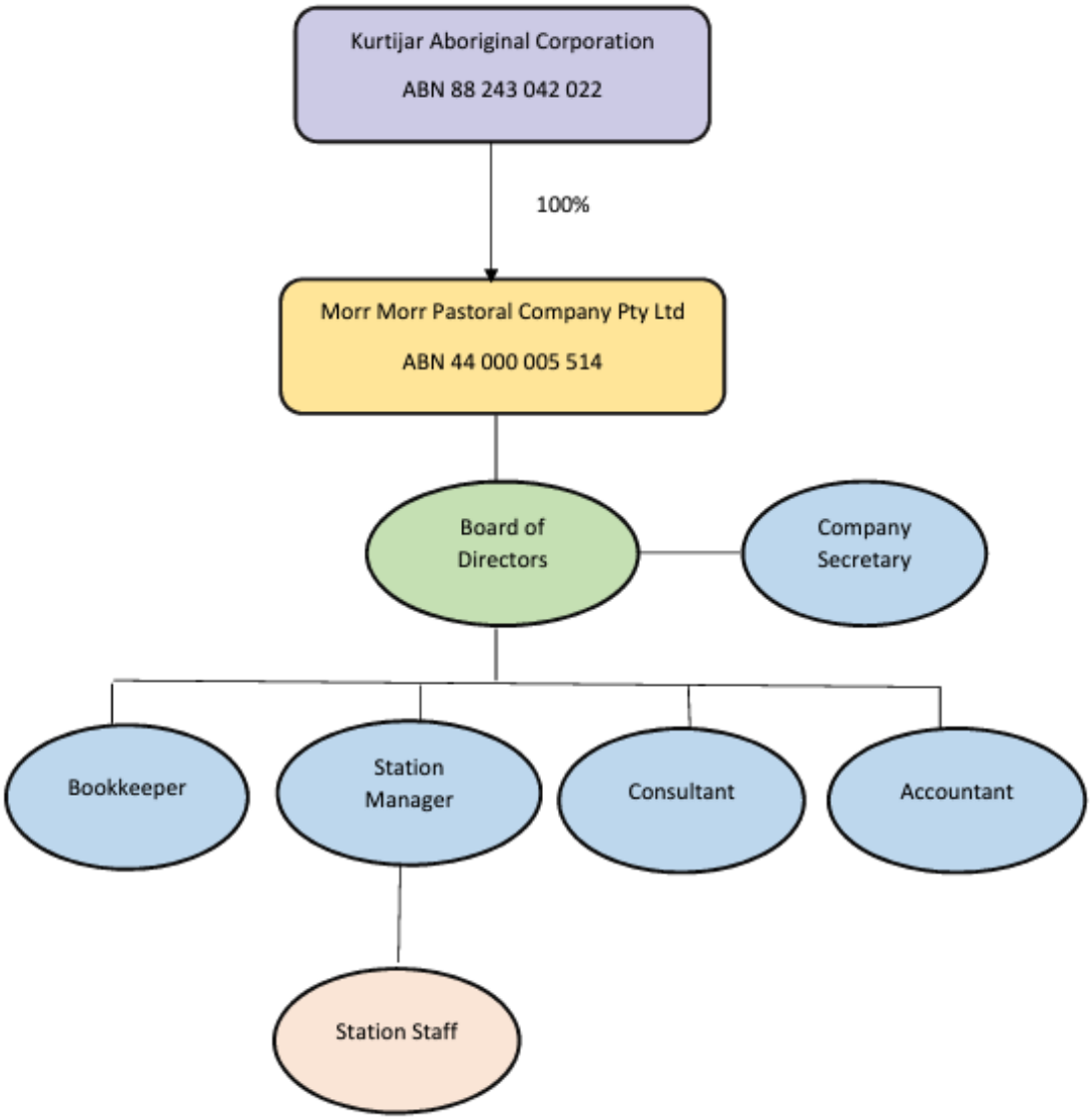


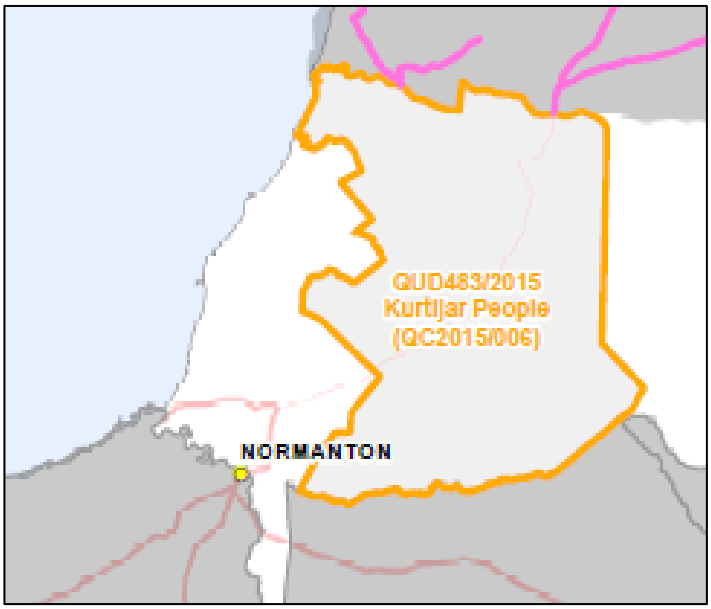
Figure 8 – Organisational Chart of the Morr Morr Pastoral Company (source: Morr Morr Pastoral Company)

Native Title Representative Body: Carpentaria Land Council Aboriginal Corporation (CLCAC)

The Carpentaria Land Council Aboriginal Corporation (CLCAC) plays an important role with respect to Traditional Owners regaining control of their traditional lands. The CLCAC is the Native Title Representative Body for nine language groups in the southern Gulf region, including Kurtijar[27]. The Kurtijar people have an elected member on the CLCAC's board.

[27] Carpentaria Land Council Aboriginal Corporation, Native title. Retrieved from: http://clcac.com.au/native-title

Many of the language groups in the CLCAC region have native title determinations over some of their lands. The CLCAC provides support services to their respective registered native title PBCs. The CLCAC is also supporting Kurtijar's current native title claim (pursuant to s. 186 of the *Native Title Act 1993*) that was registered in 2016. The claim is for non-exclusive native title over land adjacent to the Station (see Map 6).



Map 6 – The Kurtijar native title claim area is outlined in yellow, located adjacent to the Station (source: Carpentaria Land Council Aboriginal Corporation)

Should the Kurtijar's native title claim be successful, it ought not impact its neighbouring pastoral enterprise. For example, the determination of exclusive possession native title over Roebuck Plains Station in the Kimberley, northwest of Western Australia has not been commercially detrimental. Instead, the determination of native title has motivated the Yawuru native title holders to establish good governance and drive their community development framework that is inclusive and balances cultural, social and economic values. The implications of potential native title interests on the growth of the Kurtijar pastoral enterprise are not yet known.

Meanwhile, there is no native title determination or claim over the Station.

Development Framework

Indigenous Governance

MMPC acknowledges that its governance today has improved considerably compared to when the company transferred to Aboriginal ownership in 1983. Key to building its capacity has been the stability provided by sustaining long term directors and supporting the training and mentoring of its board members. Governance training is

provided to incoming directors by the Company Secretary. In addition, directors attend industry events (i.e. Beef Week) and visit other pastoral properties to develop their knowledge of the industry.

Initially, the MMPC Board employed non-Indigenous managers with the view to bringing the property's land resources, infrastructure, management and operations up to an industry standard and then to gradually transfer the required skills to local Indigenous people. In 2008, the first Indigenous management team was appointed and continued in the role for just over ten years. The subsequent incoming management team, which continue to manage the property today, are also local Indigenous people. Today the Company Secretary is the only non-Indigenous member of the management team.

Employment and training

MMPC is committed to on-the-job training and employment of local Indigenous people, particularly local youth. It conducts training initiatives throughout the year as well as providing seasonal employment and other support, such as assisting trainees to obtain their drivers licences.

On-the-job training and courses are provided in these areas:

- stock handling
- animal husbandry
- horsemanship
- plant operation
- mechanical repairs
- fencing and maintenance
- cooking and domestic work
- first aid
- butchering.

MMPC advised that there are always plenty of Kurtijar people interested in working on the Station. Also, long term stock workers are valued and can stay on the property past retirement. They pass on their valuable industry knowledge and experience to the new recruits (see Image 11).

Image 11 – Some employees at Delta Downs Station (source: Carpentaria Land Council Aboriginal Corporation 2014, p. 12)

Land Management

The property is prone to flooding during the wet season and in the past five years has experienced at least two extreme flooding events. Major flooding has had a detrimental effect on the land and pastures and impacts both land management activities and the start of the cattle season.

The property is also subject to introduced weeds. Both woody weeds and grasses are evident on the property including mimosa and prickly acacia. This problem is particularly evident in the Karumba Downs area adjacent to the township which requires ongoing management and consequently adequate resourcing.

The Australian Government's suspension of the live cattle trade to Indonesia in 2011 negatively impacted cattle prices. This had flow on effects with respect to managing the property's land resources. However, the investment in both weed and pest control (particularly long-term impacts of pigs on pastoral areas) has increased in recent years with the assistance of the CLCAC Normanton Ranger Unit.

Indigenous Rangers

The CLCAC Normanton Rangers service Kurtijar lands[28]. The Rangers support management of the biodiversity and cultural values of the Station as part of the cattle enterprise, including fire management, controlling invasive species and looking after cultural sites of significance (CLCAC 2014).

The Indigenous Ranger positions are partly funded by the NIAA through its Indigenous Advancement Strategy to undertake cultural management and land and sea management activities (CLCAC 2021). They are also partly funded by the Queensland Government through its Indigenous Land and Sea Ranger Program to undertake land and sea management activities.

Land and Saltwater Management Plan

Kurtijar people are committed to:

- Protecting culture and Country for future generations.
- Promoting healthy Country and healthy people.
- Having Traditional Owners and Rangers care for Country.
- Building a strong culture and connection to Country.
- Obtaining jobs and economic benefits from Country.
- Keeping strong partnerships with all stakeholders on Country; and
- Supporting the sustainable development of pastoralism on Country.

This commitment is made under the Kurtijar Land and Saltwater Country Plan (2014), which provides a strengths-based framework for Kurtijar people to work together with partner agencies to care for the natural and cultural values of their Country, at the same time as providing sustainable livelihoods.

Specific to the Station, KAC is committed to:

- Running commercially sustainable cattle operations.
- Diversifying economic options.
- Managing sustainable tourism.
- Maintaining and supporting cultural values.
- Providing employment opportunities to Traditional Owners.
- Supporting Traditional Owners' access to Country and resources.

[28] Carpentaria Land Council Aboriginal Corporation. About the Normanton Rangers: http://clcac.com.au/land-sea/rangers/normanton

With the assistance of the CLCAC Normanton Rangers, the Station is being managed so that the land supports a high level of biodiversity alongside a profitable cattle business. This has involved installing cattle exclusion fencing, feral pig management, and marine turtle surveying and nest protection around Lotus Lagoon and along the property's coastline. The Rangers are proud they are supporting the sustainable management of the Kurtijar owned Station (CLCAC 2014).

Business Framework: Delta Downs Station

Market background

MMPC had traditionally produced steers for the live export market given its close proximity to the then operating Karumba export terminal (McClelland Rural Services 2014). However, the export terminal now no longer operates because the channel that is typically shallow is not being dredged which significantly limits shipping access. The closest live export port is in Townsville, almost 900 km away, rendering it an economically unfeasible sole market option.

Today, MMPC conducts primarily cattle breeding and selling of 18–24-month old steers into the re-stocker market in central Queensland and on occasion, to the live export trade when able. Heifers are also sold through an agent to either the re-stocker or to the live export market with cull cows and bulls sold to the meatworks in Townsville.

Local livestock agents based in Charters Towers regularly visit the Station managers to consult on current market supply and demand. There is potential for pastoral industry growth due to increasing international demand for beef (McClelland Rural Services 2014).

Infrastructure

The Station has three homestead complexes (McClelland Rural Services 2014):

1. Delta Downs – the main station headquarters comprising housing, office, station store building, single accommodation units, governess quarters, school room, kitchen and dining room, directors' quarters, machinery sheds, meat house and generator shed.
2. Maggieville Outstation – comprising housing, kitchen and dining room, single accommodation, meat house and sheds.
3. Karumba Downs – comprising housing and sheds.

Infrastructure on the Station also includes five main cattle yards, numerous paddocks and holding paddocks (McClelland Rural Services 2014). A 56 km laneway connecting

Delta Downs to Maggieville Outstation allows the movement of cattle between the properties.

Water

An extensive pipeline system carries water from the Gilbert River to points over the Karumba plain to the west of Maggieville Outstation, while a smaller system runs water from Karumba to the western end of the plain (McClelland Rural Services 2014). Another pipeline system covers the northern end of the property. Water holes service the rest of the property, some of which are fenced off late in the year when they become boggy and the water is instead pumped via solar powered pumps directly to troughs. Delta Downs homestead is supplied with water from the Gilbert River, and Maggieville Outstation is supplied with water from Walkers Creek (McClelland Rural Services 2014). Water is accessed free of charge, except for the Kurumba Downs homestead which is connected to the town's water mains and charged accordingly.

Staffing

MMPC is the largest employer of Indigenous people on a single grazing property in Queensland's Gulf Country. About ten staff members are employed on a permanent basis and about 30 staff members are employed on a casual basis for seasonal work which normally occurs from late March to the middle of November (refer to Figure 9).

The Station Property Manager is responsible for the day to day running of the business, including bookkeeping and managing the Station store. Strong communication protocols are in place between management and MMPC's Company Secretary in Townsville. The Station Property Manager is supported by an Overseer who provides direction to the Head Stockman at Delta Downs and Maggieville Outstation and to the Caretaker at Karumba Downs. Both positions require managing staff at their respective stations.

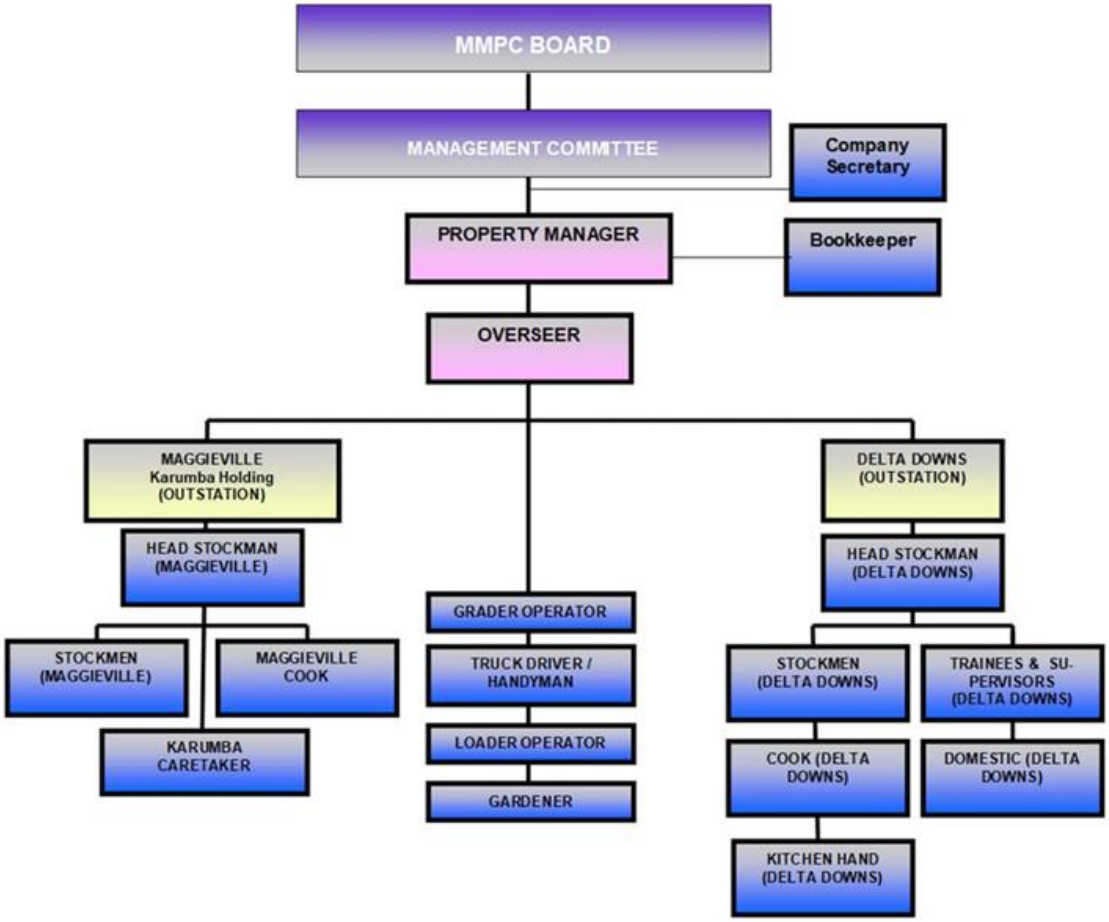


Figure 9 – Morr Morr Pastoral Company staffing structure (source: Morr Morr Pastoral Company)

Livestock

Livestock are considered to be self-generating, and thus regenerate assets. Accordingly, they are measured at their net market value under the accounting standard AASB141 (IAS41) Agriculture (KAC 2021). Net market value is determined based upon prevailing market prices for beef cattle less estimated selling and transport costs.

In 2021, Wharton & Co valued the herd of 45,138 head of beef cattle at $49,723,287 divided into:

- 7,000 head (current asset) valued at $7,711,086; and
- 38,138 head (non-current asset) valued at $42,012,201.

Table 4 provides a general breakdown of herd numbers. At the maximum number of 45,000 head of cattle, the Station supports nine cattle per ha, though the actual numbers vary between 40,000 and 45,000 in any one year. The number stays within

this range by using the natural reproductive increase in cattle to account for mortality and sales.

Table 4 – General breakdown of Delta Downs Station's 2021 herd numbers (source: Morr Morr Pastoral Company)

Herd Numbers	Opening Numbers	Purchases	Natural Increase	Sales	Rations	Deaths	Closing Numbers
FEMALES							
Joined Females	29,300	0	212	1,820	23	1,688	25,981
Unjoined Females	4,543	0	5,272	1,161	0	542	8,112
Speyed	130	0	0	129	1	0	0
Total Females	**33,973**	**0**	**5,484**	**3,110**	**24**	**2,230**	**34,093**
MALES							
Steers	7,276	0	4,795	5,057	0	490	6,524
Bulls	739	212	543	525	3	30	936
Total Males	**8,015**	**212**	**5,338**	**5,582**	**3**	**520**	**7,460**
Herd Total	**41,988**	**212**	**10,822**	**8,692**	**27**	**2750**	**41,553**

Financial analysis

At 30 June 2021, the audited financial report of MMPC showed total net assets of $53,176,601 (KAC 2021). About 80% of its assets is attributed to cattle.

The number of cattle sold over five years between 2017 and 2021, generally averaged 7,630 (refer to Table 5). However, it is noted, that in 2018 the number of cattle sold (5,191) was 32% less than the average of those years.

Sale per head generally averaged $875. However, in 2021, the sale per head was about 25% greater than the year before, reflecting market variability and the impact on the value of sales in any given year. Similarly, the profit on cattle trading went from about $11 million in 2017 to about $18 million in 2021, a 60% increase when comparing the number of animals sold.

Table 5 – Delta Downs Station profit and loss statement from 2017 to 2021

	2017	2018	2019	2020	2021
Cattle sales $	8,331,249	4,142,281	5,077,252	7,529,288	8,578,296
Number of head sold	9,509	5,191	6,909	8,932	7,618
Profit on cattle trading $	10,483,976	- 3,323,645	11,448,409	11,215,649	17,981,121
Other income (grants, insurance etc) $	477,808	594,091	1,434,489	1,255,918	323,814
Total operating expenses $	4,682,535	4,354,428	5,393,279	6,511,307	5,892,884
Administration and finance expenses $	660,684	624,218	627,623	695,964	629,742
Profit or loss $	**5,618,565**	**- 7,708,200**	**6,861,996**	**5,264,296**	**11,782,309**

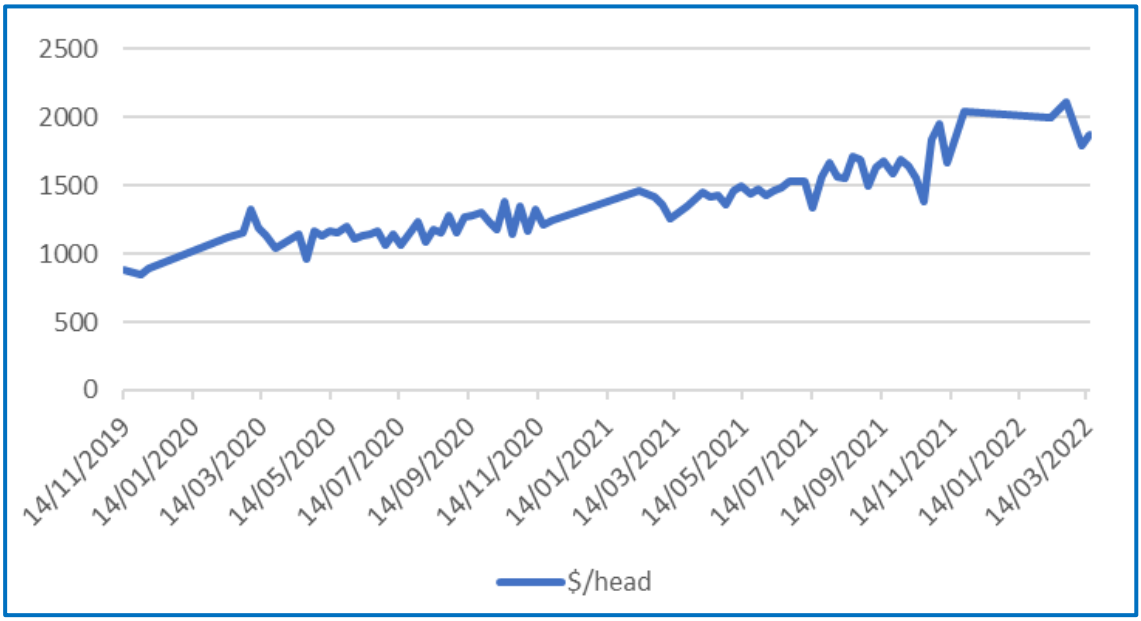
After adding other income and deducting operating and administration costs, the Station averaged a profit of about $11.8 million in 2021. Yet in 2018 the station had a loss of about $8 million when the profit on cattle trading went from $10.5 million down to -$3.3 million.

The significant depreciation in the market was most likely due to the impact of the drought in southern Australia. In response, pastoralists were selling off cattle which caused an influx of beef in the market and a drop in the price of beef. Although northern Australia was not impacted by the drought, it was still impacted by market prices. As a consequence, MMPC limited the number of head of cattle sold in 2018 but held its stock numbers. This enabled MMPC to take advantage of the market after 2019 when pastoralists in southern Australia were restocking cattle on their properties when beef was limited in the market and caused market prices to increase.

Even with a significant loss in 2018, the Station generated a five-year averaged profit of $18 per ha after expenses.

The increase in Queensland cattle prices more recently, from the end of 2019 to early 2022 is shown using data from Meat and Livestock Australia (MLA) in Graph 1. Cattle (yearling steer) prices have increased more than 100% from $849 per head to $2,045

per head. The average price has increased about 60% over the last two years when compared to prices at the end of 2019.



Graph 1 – Queensland cattle prices ($/head) from November 2019 to March 2022[29]

Future directions

The Kurtijar people's significant achievements over the past 20 years with respect to the Station have not been without challenges.

The land tenure of the Station limits future potential development of the pastoral business and other enterprises. While the leases allow for tourism, it is only for low impact tourism. KAC manages permits to three camping sites on the property, but the property has potential for more significant tourism ventures. Further, the condition of the pastoral leases precludes the use of the land as collateral for financing purposes needed for development (McClelland Rural Services 2014).

Regardless, MMPC is taking a flexible approach to exploring the business options that are available. The Kurtijar people are working with the CLCAC to investigate diversifying their business opportunities to include retail (butcher), market gardens, aquaculture and eco-tourism and cultural tourism on the Station (Gordon Capital 2013; Parker Travel Collection 2013). The combination of Kurtijar culture, an Aboriginal owned and managed pastoral station, and the natural attractions of surrounding land

[29] Data sourced using Meat and Livestock Australia Legacy Reporting Tool. Retrieved from: https://www.mla.com.au/prices-markets/unused/legacy-reporting-tool/

and saltwater Country could provide an excellent tourism product (McClelland Rural Services 2014).

MMPC meets the costs of the ongoing improvements to the Station. However, the cost of repairs, maintenance and construction is more expensive when compared to regional areas in close proximity to major centres. Future improvements include installing bores to secure a water supply to yards in the southern end of property, and to cattle yard laneways, accommodations and kitchen. However, due to the remoteness of the Station, high extra costs are incurred to cover the transport of materials and contractors.

The Kurtijar people are also interested in the ongoing management of their land, participating in water planning, maintaining cattle in harmony with Country, and having access to data to support their decision-making processes. They are working with the CLCAC in seeking funding from NIAA to support an IPA over their estate. They are concerned about the impacts of climate change and the general health of their Country from intensive grazing practices since the pastoral industry occupied their traditional lands in the mid-1800s. Their interest is to conserve high-value landscapes (cultural and biodiversity) at the same time as supporting the pastoral business across their traditional lands. Much of the region beyond the Station is pastoral land. The Kurtijar people rely on the essential services of the CLCAC Normanton Rangers to work in collaboration with other pastoralists to manage threats of invasive species and to raise their collective interest in sustaining biodiversity values using sustainable land management practices.

Finally, the pending determination of the Kurtijar native title claim to land adjacent to the Station may provide future potential for industry development.

Community Benefit

As long as there are no major disasters in the cattle market and the Station continues to be well managed, the Station should continue to be profitable and provide a range of benefits to the Kurtijar community. Even under variable market conditions, the Station has generated significant profit over the last five years averaging about $7.5 million per year or $18 per ha after expenses.

As well as contributing to the gross domestic product (GDP), MMPC provides jobs and makes donations to the Kurtijar community of between $20,000 and $30,000 each year which the KAC pays out for community benefit, including for medical support, schooling and other social needs and services.

As well as providing significant economic, employment and training benefits to the community, the Station also supports sustainable land management practices to protect national conservation and heritage values. The role of the CLCAC Rangers in providing land management services assists the Station to support sustainable business practices as well as for the Kurtijar people to sustain their cultural practices and connection to Country. The Kurtijar people view their land and saltwater Country as being important to their identity, livelihoods, food and medicines, water, sacred sites and stories and language, and for maintaining cultural knowledge, practices, authority and responsibilities for future generations (CLCAC 2014).

Since taking over the Station in 2002, the Kurtijar people have not only gained back autonomy over their traditional lands, but are also a significant participant in the region's economic wealth. Today they can proudly proclaim that their Station is one of the largest Aboriginal-owned pastoral companies in Queensland and is the largest employer of Indigenous people on a single grazing property in Queensland's Gulf Country.

Indicators of success

The key success factor for the pastoral enterprise was the repatriation of land under pastoral leases to the Kurtijar people, including 20,000 head of cattle. This initial herd provided MMPC with a firm foundation to generate cash flows and build the herd within its current range of 40,000 to 45,000 head. This is in contrast to Indigenous land acquisitions that have required the purchase of livestock to commence their pastoral operations. It can take several years to build up a sustainable herd and achieve positive cash flows and profits. This is particularly important if the nature of the land tenure places a caveat on the land, thereby limiting commercial bank funding for stocking purchases (McClelland Rural Services 2014).

In review, this case study demonstrates that:

- Repatriation of the pastoral leases by the Commonwealth has generated significant economic, employment and training benefits directly to the Kurtijar people and to GDP more broadly.
- Commonwealth agencies, such as the former Aboriginal Development Commission and its successor ATSIC, were pivotal in supporting First Nations to reacquire their land and support their social, cultural and economic interests through the use of their estates.
- With strong governance, the Station is now one of the largest Aboriginal-owned pastoral companies in Queensland.

- The clear separation of the corporate governance of the KAC and MMPC supports good business practices.
- Sustaining long-term directors with industry experience and knowledge has enabled MMPC to build its governance capacity and successfully transition the operations of its business to identified positions to manage the Station within six years.
- An experienced and sustained Station Property Manager brings skills, expertise and stability to the business operations.
- MMPC's delivery of on-the-job training for local people has successfully positioned the Station as the largest employer of Indigenous people on a single grazing property in Queensland's Gulf Country.
- The profitability of MMPC enables the financial independence of the business owner, KAC and provides further broad ranging benefits to the Kurtijar community.
- The role of the CLCAC Rangers in providing land management services supports the Station in improving its pastoral grazing practices and conserving biodiversity values.
- The role of supporting agencies, such as the CLCAC, is essential to securing funding, such as for the operations of Normanton Rangers, and for the delivery of the Kurtijar Land and Saltwater Management Plan, which the KAC and MMPC would not have the capacity to achieve.
- Commonwealth and Queensland Government funding programs for Rangers are beneficial in promoting Indigenous land management practices and supporting sustainable pastoral practices.

KUTI CO AND NGARRINDJERI ABORIGINAL CORPORATION AND NGOPAMULDI ABORIGINAL CORPORTATION

Fishing in the Lower Lakes and Coorong of South Australia

Acknowledgements

ANU pays respects to the Ngarrindjeri Traditional Owners of the land and waters in the Yarluwar-Ruwe (Sea Country) on the Younghusband Peninsula. ANU also acknowledges the invaluable contributions of the case study partner Kuti Co and its joint owners, the Ngarrindjeri Aboriginal Corporation and Ngopamuldi Aboriginal Corporation, and the supporting agencies, Ngarrindjeri Regional Authority, Jawun, Goolwa Pipi Co and the Indigenous Land and Sea Corporation.

Brief Overview

Kuti Co is an Ngarrindjeri-owned fishing enterprise that is participating in the South Australian pipi fishery along the beaches of the Coorong and Lower Lakes in the Lower Murray River region of South Australia (see Map 7). It is jointly owned by the Ngarrindjeri Aboriginal Corporation (NAC), which represents the native title rights and interests of the Ngarrindjeri people, and the Ngopamuldi Aboriginal Corporation (Ngopamuldi), which is a small corporation with experience in successfully managing land-based enterprises.

Kuti Co was incorporated in 2019. Its establishment was assisted through a significant industry partnership with Goolwa Pipi Co (GPCo) and project support from the ILSC. Today, Kuti Co owns a commercial fishing licence, 15.82% of quota in the South Australian commercial pipi fishery, and approximately 22% shareholdings in GPCo,

Australia's largest pipi processing and marketing company. The enterprise generates significant broad ranging returns to the Ngarrindjeri community and enterprises.

Image 12 – South Australian pipis (source: Kuti Co 2020)

Regional Background

Location

Kuti Co owns a fishing licence and a quota to harvest pipis (Ngarrindjeri name – Kuti; scientific name – *Plebidonax deltoids*; common name – Goolwa cockle) from the Lower Lakes and Coorong. The Coorong and Lower Lakes are located about 150 km south east of Adelaide within the towns of Goolwa, Raukkan and Kingston (refer to Map 7).

Map 7 – Map showing Ngarrindjeri's ancestral tracks. Pipis are harvested along the Coorong and Lower Lakes of the Lower Murray River south east of Goolwa in South Australia (source: Ngarrindjeri 2006)

Colonial History

The Coorong (kurangk – Ngarrindjeri language, meaning long, narrow neck) is home to 18 Ngarrindjeri tribes (laklinyerar – Ngarrindjeri language). Ngarrindjeri people's

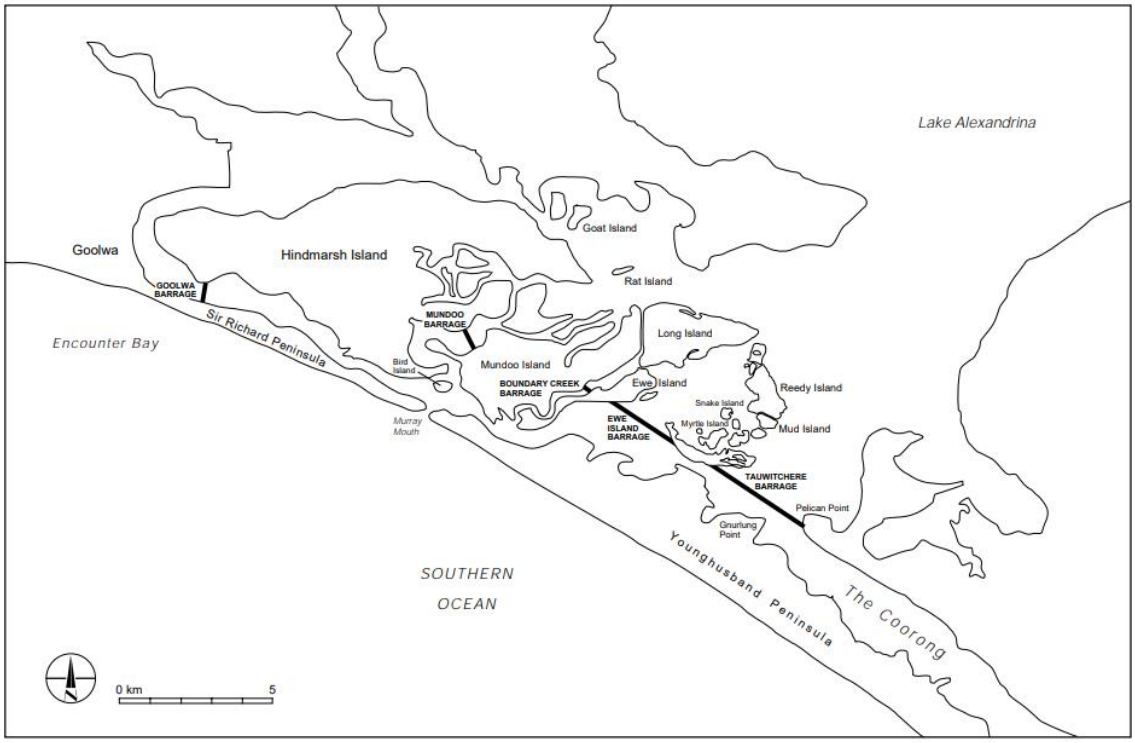
knowledge of marine, intertidal, estuarine and freshwater environments has enabled them to sustainably harvest many species of fish and shellfish for tens of thousands of years (Ngarrindjeri 2006; Wilson 2017). Pipi (Kuti) beds in the Lakes and Coorong Fishery represent the largest population in Australia with middens, burial grounds and historic campsites containing millions of pipi shells, confirming the significance of the area and that shellfish was a staple in the diets of Ngarrindjeri people for millennia (ILSC 2020; Wilson 2017). The Coorong continues to have significant cultural and economic importance to them (Kuti Co 2020).

Harvesting, trading and consuming pipis and other marine resources from the coastal waters is viewed by the Ngarrindjeri to have always and will continue to underpin their culture, societies and economies (Ngarrindjeri 2006).

> *Since colonisation, however, Ngarrindjeri people have been marginalised from the economic benefits of those resources, and the resources themselves have deteriorated through unsustainable use and destructive environmental management practices* (Ngarrindjeri 2006, p. 28).

European colonisation officially occurred in 1836 when The British Crown *Letters Patent of 1836* established the Province of South Australia. Ngarrindjeri's first contact with European settlers was in about 1810 when sealers started operating from Kangaroo Island, and introduced diseases to their communities. The provisions of the *Letters Patent of 1836* sought to protect Ngarrindjeri traditional rights to their lands, waters and resources but have to date been largely ignored. This includes Ngarrindjeri's more recent petition in 2003 to the South Australian Government to transfer title of Crown land to Ngarrindjeri people and negotiate a Treaty (Ngarrindjeri 2006).

During the 1840s, farmers and settlers illegally occupying Ngarrindjeri lands became more prevalent (Ngarrindjeri 2006). The Ngarrindjeri people consider that the invasion of settlers 'was swiftly followed by destructive changes to our environment, the effects of which continue to impact on us today' (Ngarrindjeri 2006, p. 15). From the 1860s, successive South Australian Governments supported the construction of drains that effectively channelled the freshwater from the wetlands into the sea so that the land could be developed for agriculture. From 1935 to 1940 the South Australian Government then funded the construction of five barrages at the southern end of Lake Alexandrina (refer to Map 8). The barrages, that still exist today, prevent the natural flow of saltwater into the lake and up the Murray River which had previously travelled great distances inland and was integral to the ecology of the area.



Map 8 – Map showing the five barrages, shown by the thick black lines, constructed in the 1930s to separate water flows between the Coorong and lakes (source: Department of Environment and Heritage 2000, p. 10)

However, more recently, Ngarrindjeri have become more engaged in developing public policy, such as regional NRM planning and Commonwealth marine planning relevant to the recognition of Ngarrindjeri rights and interests in their lands and waters. Examples of this engagement include the Coorong and Lakes Fisheries Management Plan, the review of the *Fisheries Act 1982* and the publication of their Sea Country (Yarluwar-Ruwe) Plan (2006) working with the National Oceans Office.

In 2017, the Federal Court determined the Ngarrindjeri people's native title claim that resulted in the recognition of non-exclusive native title rights for some of their traditional land including the Coorong. The native title determination is viewed by NAC to have opened the door and better positioned Ngarrindjeri people to negotiate their interests. It recognises and validates Ngarrindjeri people's values, interests and connection to Sea Country and importantly provides a mechanism to participate in decisions around planning and management of their lands and waters. Today, Ngarrindjeri are active participants and a significant shareholder in the commercial pipi fishing industry.

Demographics

About 40,400 people live in the Lower River Murray, Lakes and Coorong region, of which 1,531 identify as Indigenous[30]. Of the Indigenous population, 51% are employed compared to 39% for the non-Indigenous population. The main employment industries are agriculture, forestry and fishing[31].

Geography and Climate

The Coorong covers a total land area of 883,343 ha of which 152,950 ha (17% of the land area) are protected. Protected areas include one National Park and 105 other areas.

The Coorong marks the end of the Murray River. Along its coast, the Coorong has a long, shallow saline lagoon stretching about 100 km south east in parallel to the coast (DEEWA 2010). The waterbody is separated from the Southern Ocean by the coastal dune barrier of Younghusband and Sir Richard Peninsulas. It is hydrologically connected to the Lower Lakes Alexandrina and Albert that comprise fresh to brackish/saline waters. Together the lakes cover approximately 648 km^2 which makes them the largest freshwater body in South Australia (DEH 2000).

The Coorong experiences seasonal changes in water levels by as much as one metre in the southern lagoon between late spring (high) and late autumn (low) (DEH 2000). As water levels fall from early summer, extensive tidal mud flats are exposed along its southern shores.

In 1974, the Commonwealth designated approximately 140,500 ha of the Coorong as a Wetland of International Importance under the Ramsar Convention on Wetlands (refer to Map 9). It is the first designated Ramsar site in the world (DEWHA 2013). The site includes 23 wetland types that provide habitat for nationally threatened species of fauna and flora. Commercial fishing is still permitted in the area and some of the northern islands within the Coorong lagoon are reserved for the purposes of the Ngarrindjeri people. Most of the edge of Lakes Alexandrina and Albert continue to be used for farming. Part of the Coorong is also included in the Coorong National Park and Game Reserve that is managed by the South Australian Government.

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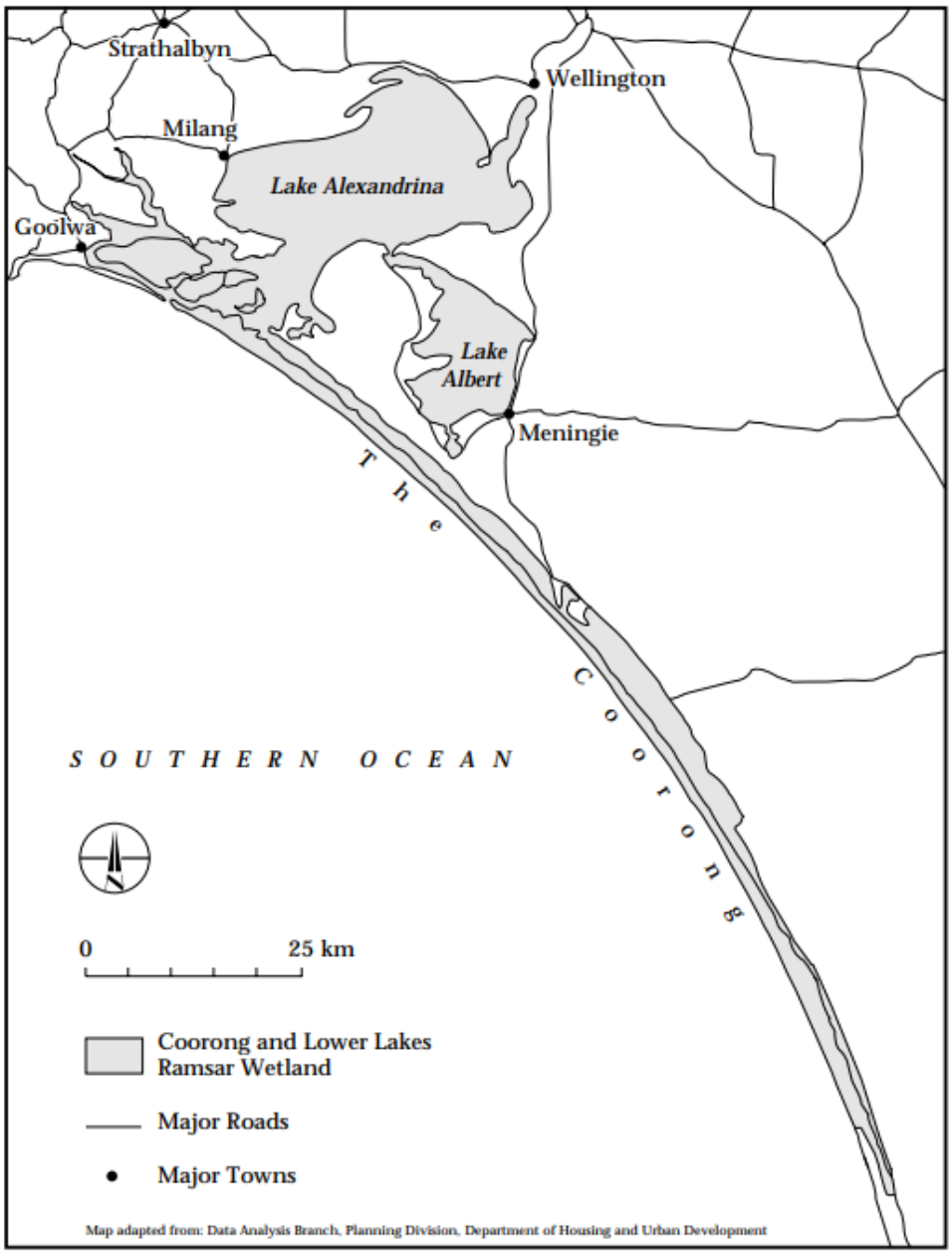
[30] Ngarrindjeri Ruwe, Empowered Communities Booklet. Retrieved from: https://www.nrec.org.au/_files/ugd/9862d0_777e7029a15f49e59c9a8551ff23ee46.pdf

[31] Australian Bureau of Statistics. Region summary: The Coorong (DC). Retrieved from: https://dbr.abs.gov.au/region.html?lyr=lga&rgn=47800



Map 9 – Map showing Coorong and Lower Lakes Ramsar Wetland (source: Department of Environment and Heritage 2000, p. 10)

The Coorong is in a semi-arid region characterised by warm summers and cool winters (Wilson 2017). The majority of rain falls between May and September averaging about 66 mm total rainfall per month with the highest rainfall (79.7 mm) in July[32]. Respective temperatures average between 18ºC (max) and 15ºC (min). February is the driest

[32] Australian Government Bureau of Meteorology Climate Data Meningie, South Australia. Retrieved from: http://www.bom.gov.au/climate/dwo/IDCJDW5035.latest.shtml

month, averaging 14.8 mm total rainfall and temperatures between 30°C (max) and 27.6°C (min).

The Murray River, which flows into the Coorong, has been subject to periods of extreme flooding, as well as periods of extreme droughts (Wilson 2017).

Water resources

The Coorong and Lower Lakes are part of the Murray Darling Basin that covers 1,061,469 km² and managed under the Murray Darling Basin Plan (2012) made under the *Water Act 2007 (Cth)*. Management of the Coorong and Murray Mouth is through the South Australian Murray Region Water Resource Plan (2018), approved under the Murray Darling Basin Plan.

Extensive water extraction since the 1800s from the Murray Darling Basin and the construction of drains and barrages around the Lower Lakes for agricultural purposes have significantly impacted the ecosystem and freshwater flows of the Coorong (DEEWA 2010; DEW 2018). The average annual stream flow at the mouth of the Murray has decreased by as much as 61% due to water extraction from the basin for consumptive purposes[33]. One of the key objectives of the Ramsar Management Plan is to improve water quality and flows throughout the wetlands and increase environmental benefits (DEH 2000).

Flows into the Coorong are integral to maintaining the ecological character of the area, including the recruitment of pipi and other fishery species, and highly dependent on water extraction (DEW 2018). To restore ecologically sustainable flows to the Coorong, environmental water entitlements are provided under the 2018 Water Resource Plan to maintain wetland salinity levels within the range 60,000 mg/L to 100,000 mg/L (DEW 2018).

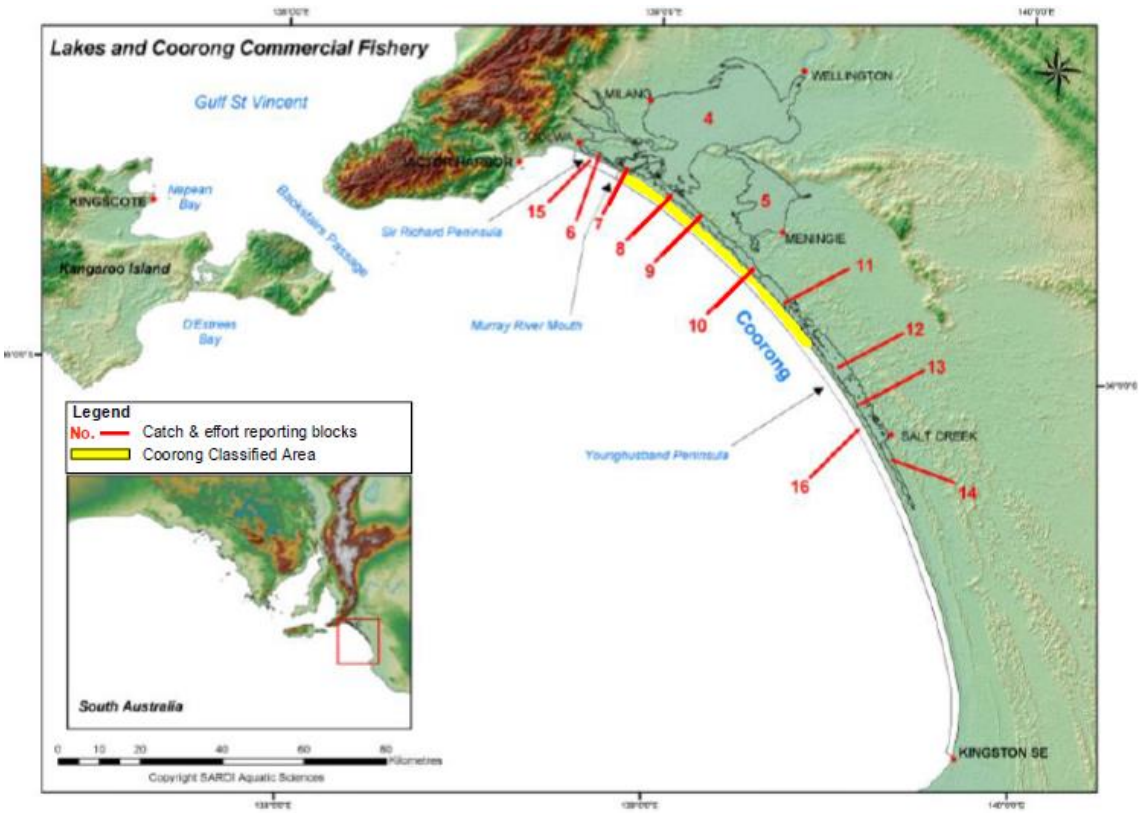
Pipi fishery

Native to South Australia, pipi are a fast growing (up 61 mm width), short-lived (3 to 5 years) and highly productive species of surf clam (DPIR 2022). Pipis are managed as a self-recruiting population. Populations have large natural fluctuations in abundance that may be driven by environmental conditions, with studies suggesting that smaller freshwater flows may benefit pipi recruitment by providing nutrients, in contrast to periods of high river discharge which may cause widespread mortalities.

[33] CSIRO Murray-Darling Basin sustainable yields project. Retrieved from: https://csiropedia.csiro.au/murray-darling-basin-sustainable-yields-project/

By the 1950s, pipis were being commercially harvested for bait and by 1998 methods were being used to de-sand the pipis so they could be marketed for consumption. By 2004, about 30% of the pipi harvest was exported for consumption (70% exported as bait). At the time, the key management tools for the pipi fishery were the annual fishery closure from July to October and catch size (minimum 35 mm). To manage the growing industry, in 2009 the South Australian Government introduced quotas to control effort (relevant to 50% for bait and 50% for food harvests).

The fishery is currently managed by the South Australian Government under its Management Plan for the South Australian Commercial Lakes and Coorong Fishery (2022) (Fishery Management Plan) which is constituted by the Fisheries Management (Lakes and Coorong Fishery) Regulations 2009 with respect to the *Fisheries Management Act 2007*.



Map 10 – Map showing the Lakes and Coorong Commercial Fishery classified area identified in yellow (source: Department of Primary Industries and Regions 2022, p. 3)

The Lakes and Coorong pipi fishery is allocated on the basis of area, with the commercial sector having access to 73% of the fishery area (length 192 km). Recreational (26%) and Indigenous (1%) fishing occurs at either end outside the

commercial area (total length 64 km). Map 10 shows the location (Coorong Classified Area marked in yellow) from where pipis for human consumption must be harvested.

Access to the pipi fishery is provided through an individual catch quota (DPIR 2022). Pipi quota entitlements are the maximum number of kilograms of pipi that may be taken by the licence holder as applied under the fishery regulations. Pipi are harvested throughout the year by hand, using rakes (refer to Image 13). Assessed every four years, the 2019 stock assessment reported that pipi are being harvested within sustainable limits. It also reported that whilst sustainable, the increasing popularity in the consumption of pipi will require ongoing monitoring to ensure that stocks continue to sustain increasing fishing pressure (DEE 2019).

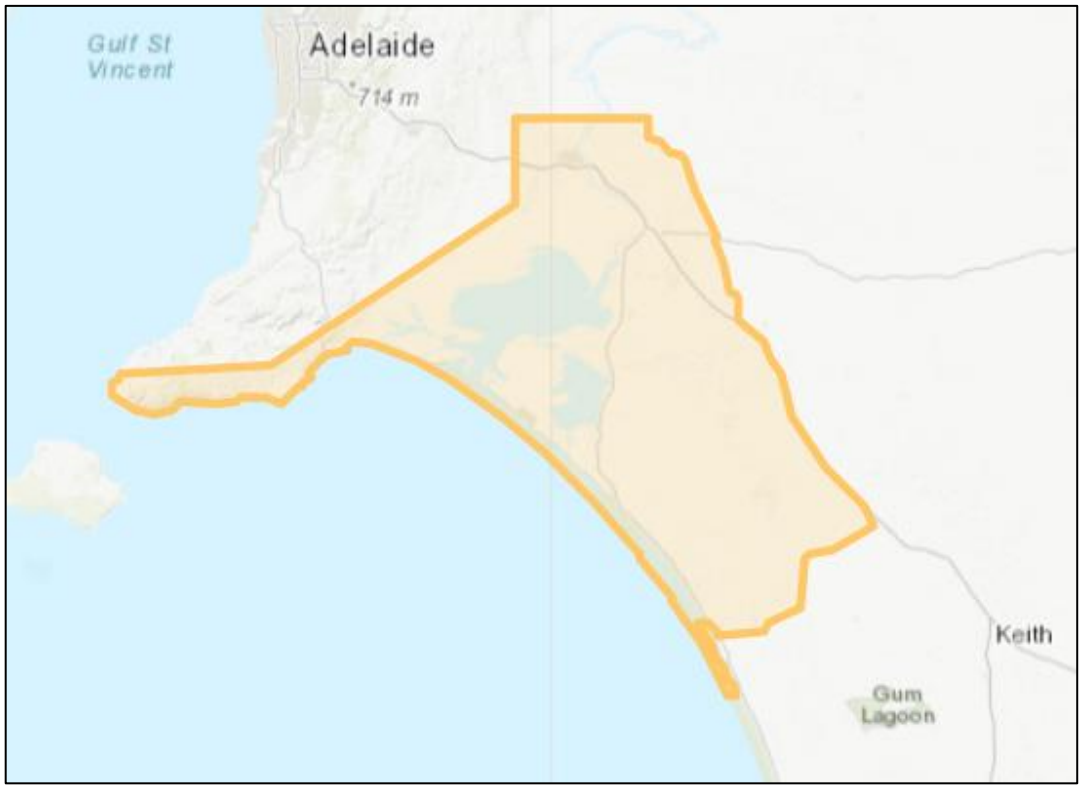
Image 13 – Kuti Co staff hand raking pipi (source: Kuti Co 2020)

Corporate and Governance Framework

Land Tenure: Native title

The Ngarrindjeri people were granted on 14 December 2017 non-exclusive native title rights over 578 parcels of land within the Murray lands and Fleurieu Peninsula determination area, including the Coorong[34]. The determination area is located east of Adelaide, from Murray Bridge, south west to Cape Jervis and south east almost to Tintinara (refer to Map 11). The South Australian Native Title Services Ltd is the native title service provider in South Australia and assisted with the Ngarrindjeri's native title claim.

[34] The Murray Valley Standard. Ngarrindjeri native title claim settled. Article Issued 18 December 2017. Retrieved from: https://www.murrayvalleystandard.com.au/story/5122664/ngarrindjeri-native-title-claim-settled/



Map 11 – Map showing the Ngarrindjeri and Others Native Title Claim determination area in yellow35

Prescribed Body Corporate and Kuti Co Equity Partner: Ngarrindjeri Aboriginal Corporation (NAC)

NAC is the PBC for the Ngarrindjeri people[36]. It was registered on 06 December 2017 under the CATSI Act. Prior to its establishment the Ngarrindjeri people had negotiated their interests directly with the state government.

Kuti Co Equity partner: Ngopamuldi Aboriginal Corporation (Ngopamuldi)

Ngopamuldi (meaning 'a walker' in Ngarrindjeri language) was established in 2004 to develop and implement processes that build the capacity of First Nations to participate in the management of natural resources throughout South Australia. Its role is to provide employment, training and development opportunities to the community to alleviate disadvantage.

[35] National Native Title Tribunal – South Australia. : http://www.nntt.gov.au/searchRegApps/NativeTitleRegisters/Pages/NNTR_details.aspx?NNTT_Fileno=SCD2017/002

[36] Ngarrindjeri Aboriginal Corporation Representative Native Title Body Corporate overview. Retrieved from: https://nativetitle.org.au/find/pbc/8743

Ngopamuldi has a board of six Ngarrindjeri Directors and a management team to deliver key activities. These include the Coorong and Murray Lower Lakes NRM Project, and business development projects such as its wildflower production project, Yunta Walun.

In 2016, Ngarrindjeri representatives were approached by GPCo about a financial interest to participate in the pipi fishery. GPCo agreed to appoint an Ngarrindjeri advisor to its board and within the same year, Ngopamuldi acquired 1000 units of quota (equivalent to 1% of the industry) and became a B Class Shareholder of GPCo.

Ngopamuldi has 50% ownership of Kuti Co.

Business entity: Kuti Co Ltd

Kuti Co harvests pipi and supplies them to GPCo for processing and marketing to high-end restaurants and nationwide distributors such as Coles Supermarkets (Kuti Co 2020).

Kuti Co was incorporated in 2019, two years after Ngopamuldi acquired its first quota and became a B Class shareholder of GPCo. In the lead up to its formation, in 2017, the Ngarrindjeri Regional Authority (NRA) and Ngopamuldi worked with the Jawun organisation to include Ngarrindjeri in GPCo's Strategic Plan with the target to acquire 25% of the pipi fishery industry. This involved commissioning a report on the economic viability of the venture and a proposed investment strategy. The scheme was then presented to the ILSC and in 2018, the ILSC gave in-principle support.

In 2019, Kuti Co was established and the ILSC approved a grant to Kuti Co that has enabled it to purchase a commercial fishing licence and increasingly acquire quota and shares in GPCo.

Kuti Co has a board of three Directors, one of whom is independent and provides industry expertise and two representatives of its joint owners, the NAC and Ngopamuldi (refer to Figure 10).

Figure 10 – Overview of Kuti Co structure and its total catch volumes 2019/2020 (source: Kuti Co 2020)

Development Framework

Sea Country

Although Ngarrindjeri people have been harvesting fish and shellfish for tens of thousands of years, their access to these resources has more recently been restricted due to Governments' various fisheries laws, regulations and management plans and development decisions associated to the environmental damage to the Coorong. Ngarrindjeri view these rules and plans as grossly inadequate in representing their interests and protecting the region's cultural and ecological values and that they have effectively been marginalised from the economic benefits of fishery resources (Ngarrindjeri 2006).

With support from the Australian Government's National Oceans Office, native title holders developed the Ngarrindjeri Nation Yarluwar-Ruwe (Sea Country) Plan (2006) as part of Regional Marine Planning in Australia. Ngarrindjeri view the Sea Country Plan as the framework to apply a full range of cultural rights and interests, including native title rights, to the process of looking after Ngarrindjeri Country and participating in fishery economies (Ngarrindjeri 2006). This action-based plan presents Ngarrindjeri's strategic priorities to participate in fisheries management and enterprise development, gain active management of their Sea Country, develop research and policy, secure data autonomy and sovereignty and network with other First Nations organisations,

such as the Murray Lower Darling Rivers Indigenous Nations (MLDRIN) in holistic management practices.

Less than ten years after developing the plan, Ngarrindjeri people with the support of relevant agencies, have secured a significant interest in the pipi industry that facilitates their participation in the regional economy. Further, Ngarrindjeri are now recognised caretakers of the Lower Lakes and Coorong through Ngopamuldi's Coorong and Murray Lower Lakes Working on Country program. The Coorong and Lower Lakes Rangers associated with the program are funded through NIAA. Activities of the Rangers include managing the estuary, floodplain and wetland environments through to the monitoring and protection of threatened species. The Rangers also operate and manage a native plant nursery that produces around 50,000 plants annually for the rehabilitation of wetland and habitats around the lakes.

Ngarrindjeri Regional Authority (NRA)

NRA is the peak representative body of the Ngarrindjeri people. It is made up of representatives from 12 grassroots Ngarrindjeri organisations, plus four additional elected community members. Its purpose is to:

- Protect and advance the welfare of the Ngarrindjeri people.
- Protect areas of special significance to the Ngarrindjeri people.
- Improve the economic opportunities of the Ngarrindjeri people.
- Facilitate social welfare programs benefitting Aboriginal people.
- Pursue Native Title over the traditional lands and waters of the Ngarrindjeri people.
- Enter into agreements of contracts with third parties on behalf of the Ngarrindjeri people.
- Manage land of cultural significance to the Ngarrindjeri people, and to hold any interest in such land as trustee or otherwise on their behalf.
- Act as the trustee under any trust established for the benefit of the Ngarrindjeri people.
- Protect the intellectual property rights of the Ngarrindjeri people.

NRA was instrumental in supporting the establishment of Kuti Co, in negotiating Ngarrindjeri people's interests with GPCo and ILSC and is active in associated

activities. These include working with the South Australian Department for Environment and Water on the Coorong and Lower Lakes Recovery Project and the Ngarrindjeri Partnerships Project.

Jawun

Jawun is a national Indigenous organisation that has worked alongside the Ngarrindjeri Nation since 2015. Jawun forms partnerships to benefit corporates, government agencies and First Nations that are intended to improve the lives of First Nations people and their communities.

Working with Ngopamuldi and other Ngarrindjeri leaders, Jawun has supported Kuti Co's development through about 30 secondees with various expertise from Allens, Royal Automobile Association, the Australian Public Service, the South Australian Government, Woodside and Westpac. Jawun also assisted with the initial funding proposal to the ILSC, partnership development including with GPCo, stakeholder engagement, the branding and coordination of the official launch of Kuti Co, undertaking a risk analysis, preparing work, health and safety documentation, and process development for Kuti Co to be ready to operate.

Goolwa Pipi Co (GPCo)

GPCo is the largest pipi processing and marketing company in Australia. Most of its product is sold for consumption while a smaller portion is sold as bait (see Image 14). Pipis are cleaned and packed at GPCo's facility in Port Elliot, South Australia, and sent to customers nationally and internationally. GPCo also has the responsibility for directing harvest timing and product quality and has worked with the Marine Stewardship Council for over a decade to gain certification for sustainable seafood.

Image 14 – Goolwa PipiCo packaged pipis for consumption (source: Kuti Co 2020)

From 2019 until 2021, GPCo supported Ngopamuldi to train Kuti Co's five Ngarrindjeri harvest crew. Today, Kuti Co is an A Class shareholder of GPCo with a Director appointed to the GPCo Board, which is viewed by the Ngarrindjeri as a significant milestone. This also comprises a strategic long-term partnership and pipi supply agreement with GPCo, which binds Kuti Co to supply and harvest its pipi quota in cooperation with GPCo (Kuti Co 2020). As part of the arrangement, Kuti Co owns approximately 22% shares in GPCo in proportion to its pipi quota unit holding and accordingly receives dividends from GPCo. Relevant to its shares in GPCo, Kuti Co also has a stake in GPCo businesses, such as its South Australian Bait Supplies and Good Sea Company.

In return, among other reciprocities, Kuti Co's partnership has assisted GPCo to grow its quota from 60% to 85% of the total fishery (ILSC 2020).

Indigenous Land and Sea Corporation (ILSC)

The ILSC supported significant funding to Ngarrindjeri to realize their vision to participate in the Lower Lakes and Coorong fishery. The venture was ILSC's first investment in Sea Country assets following the change to its policy in 2019 to include fresh and saltwater-based projects in the ILSC's remit (ILSC 2020).

The ILSC is investing $5 million over four years (2019–2023) (ILSC 2020). This has enabled Kuti Co to purchase a fishing licence and commercial pipi quotas. The ILSC also supported the engagement of an industry expert onto Kuti Co's Board. Through this investment, Kuti Co's stake in the industry went from 1% to currently 15.82%.

ILSC's funding has been fundamental to supporting Kuti Co' strategic development and delivering to the Ngarrindjeri community profits, employment, cultural and new Sea Country business outcomes over the life of its 5-year Strategic Plan (2020–2025) and beyond.

Other Agencies

The Ngarrindjeri lands are one of ten regions across Australia implementing the Empowered Communities initiative. Funded by the Commonwealth since 2015, the Empowered Communities initiative seeks to transform the relationships and ways of working between government and First Nations peoples[37].

The Ngarrindjeri have establshed another Aboriginal corporation for this purpose, Ngarrindjeri Ruwe Empowered Communities (NREC) which operates across the Murraylands, Southern Fleurieu and Lower Lakes and Coorong. NREC's board is made up entirely of Ngarrindjeri community members and its staff work with opt-in community organisations to support community benefit by becoming economic participants in regional development. Although, NREC has not been directly involved with the development of Kuti Co, they have mechanisms to support its business in the future, particularly in relation to identification and allocation of government resources.

Business Framework: Kuti Co

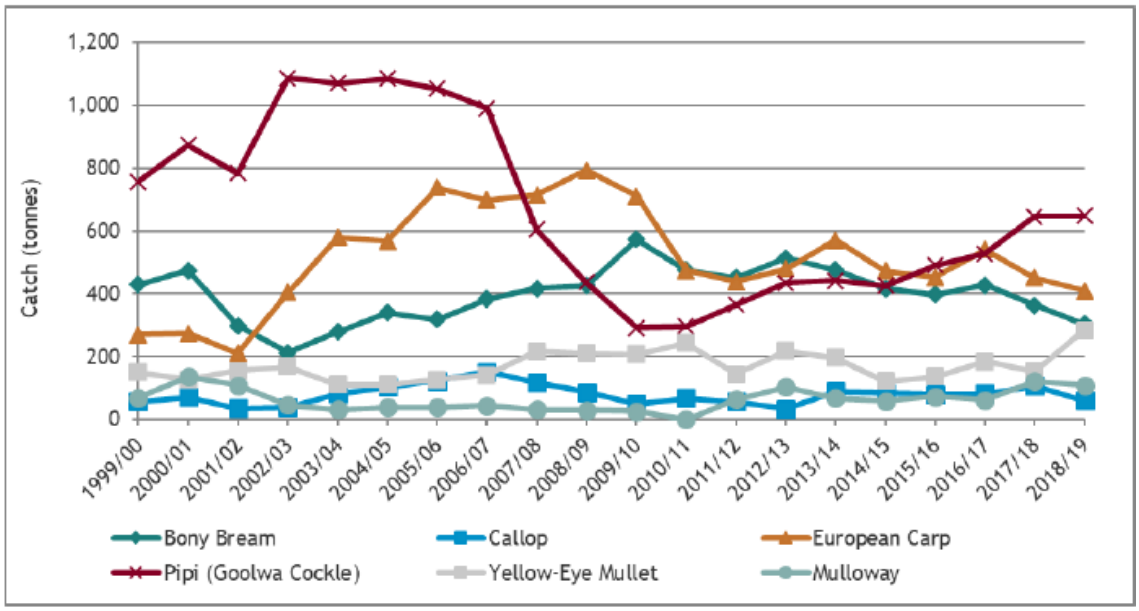
Market Background

Under the *Fisheries Management Act 2007*, licenced quota holders must supply catch data for quota management, and specifically for pipis, other data including time, location, search time and sea conditions.

The South Australia Government Department of Primary Industries and Regions (DPIR) 2022 report charts catch data (tonnes) of the multispecies Lakes and Coorong Fishery over 10 years (1999 - 2019) (refer to Graph 2). The diagram shows the catch volume of pipi compared to other high-volume species (DPIR 2022, p. 13). Up until 2008, pipis accounted for around 80% of the total value of the fishery, after which catch volumes dramatically declined. The decline reflects changes to fisheries regulations

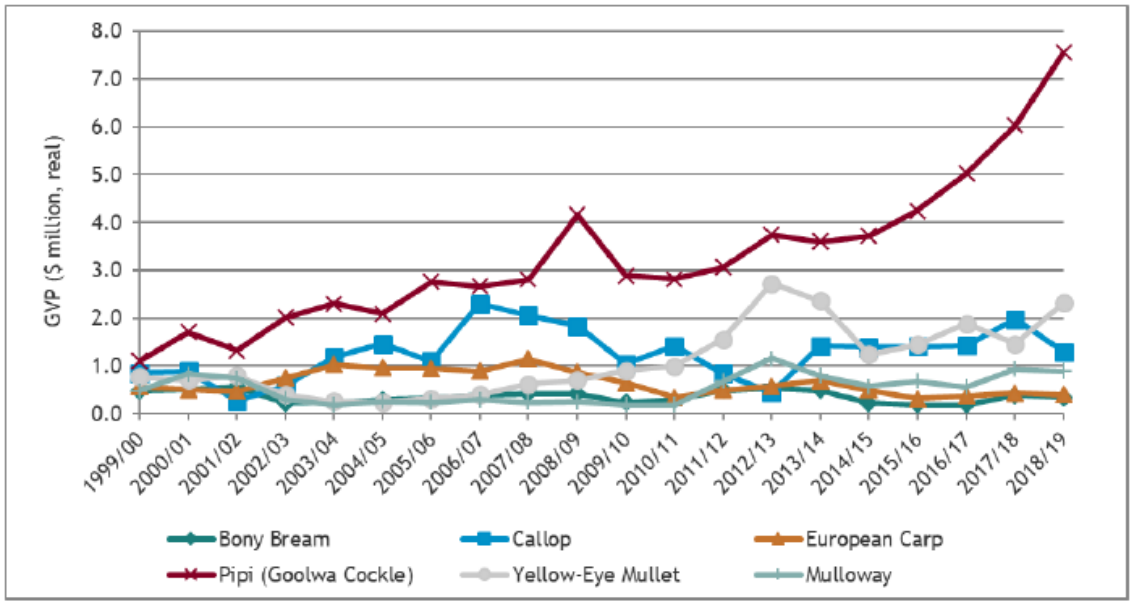
[37] Empowered Communities. Ngarrindjeri Ruwe Empowered Communities. Retrieved from: https://www.nrec.org.au/

with the introduction of Catch Quota Units (Ferguson & Ward 2014). Even after 2009, with reduced catch, pipi continues to be a key species making up in general, about half of the total value of the fishery (Ferguson & Ward 2014).



Graph 2 – Ten year (1999 – 2019) catch data of higher volume species from the Lakes and Coorong Fishery. Pipi annual volumes are shown in red (source: Department of Primary Industries and Regions 2022, p. 13)

The multispecies Lakes and Coorong Fishery output and contribution to Gross State Product (GSP) shows a slight increasing trend from 1999 to 2019 (refer to Graph 3). Despite the decreased pipi catch volumes after 2009, the gross value of pipi production has continued to increase well above other high-volume species. Across 2018–2019, the total Lakes and Coorong fisheries industry contribution to GSP was $21.6 million of which $10.5 million was attributed directly to fishing, $2.9 million to downstream activities and $8.1 million to other sectors of the state economy (DPIR 2022). Pipi had the highest gross value production, about $7.5 million, and about three times higher compared to other species, suggesting the market for pipis is strong and increasing, and most likely relevant to the increasing public interest in its consumption.



Graph 3 – Ten year (1999 – 2019) gross value of production of major species in the Lakes and Coorong Fishery (source: Department of Primary Industries and Regions 2022, p. 14)

Fishing Licence, Quota and Catch

Kuti Co's Fishing Licence (L33) and Quota Units permit it to harvest 155.82 tonnes of pipi annually. The licence is for the term of the current management plan, which is until 2027 (DPIR 2022).

Infrastructure

Kuti Co harvests pipis manually from the intertidal zone using hand-held rakes and specially equipped 4WD vehicles that include a grading machine to ensure the size of the pipis meet regulatory requirements (ILSC 2020). Kuti Co also has a base on Hindmarsh Island including a shack for the workers and a shed to store equipment. Part of the ILSC funding has covered the initial outlay of fishing equipment and infrastructure. Kuti Co also has a landing barge which the Murray Darling Basin Authority funded through a grant. Today, Kuti Co maintains a sinking fund to be applied to equipment replacement and repairs and applies for funding grants where able (Kuti Co 2020).

Staffing

Employment of staff is contracted through an independent agency. Kuti Co currently supports ten Ngarrindjeri staff, including a harvesting team of five full time and two part time employees, Directors, administration and finance staff.

Financial Analysis and Profitability

ILSC's grant in 2019 of $5 million over four years has allowed Kuti Co to acquire a fishing licence, Quota Units, fishing equipment, employ staff and manage corporate governance and business operations, including its shareholdings with GPCo.

In less than three years, Kuti Co has:

- Increased Ngarrindjeri's initial investment in the industry from 1% to 15.82%;
- Increased pipi harvest catch volumes from 49.5 tonnes (2019–2020 reporting period) to current (2021–2022) annual harvest of about 70 tonnes. Next year's catch target is 100 tonnes which is within their current 155.82 tonne quota limit;
- Increased Ngarrindjeri's initial 1% shareholdings in GPCo to currently approximately 22%; and,
- Advanced from a B Class to an A Class Shareholder in GPCo (2019–2020), including holding a position on its Board of Directors.

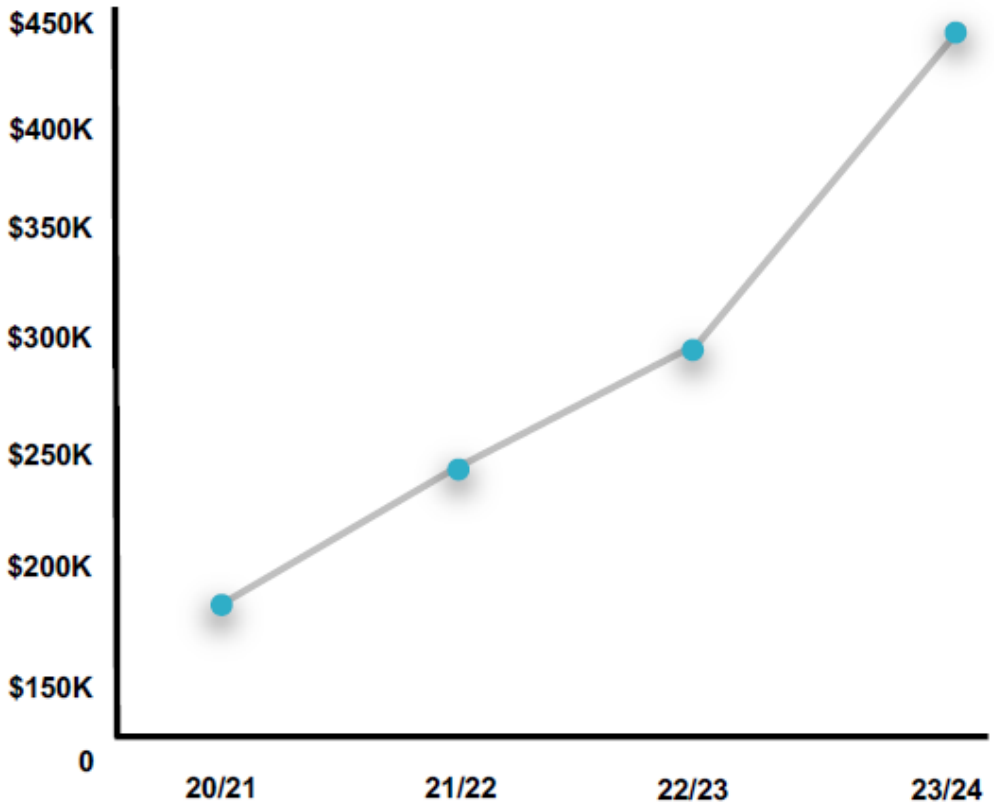
Kuti Co's Strategic Plan (2020–2025) sets out directions to gradually increase its pipi quota to 25% of the fishery (refer to Table 6). The main barriers to achieving this include the availability of quota in the fishery, the price of quota and raising capital to purchase quota.

Table 6 – Kuti Co's quota purchase program 2020–2024, based on 2019 estimates (source: Kuti Co 2020)

Item	2020-21	2021-22	2022-23	2023-24
New Quota Purchase	5%	5%	3%	1%
Cumulative quota holding	16%	21%	24%	25%
Capital required (@ $230,000/1% new quota)	$1,150,000	$1,150,000	$690,000	$230,000
Share Capital GPCo required (@$45,000/1% new quota)	$225,000	$225,000	$135,000	$45,000
Barge Enterprise Expenses	$40,000	$250,000		
Annual Ngarrindjeri Capex	$1,415,000	$1,625,000	$825,000	$275,000
Total Cumulative Ngarrindjeri Capital Investment	$1,415,000	$3,040,000	$3,865,000	$4,140,000

Kuti Co's Strategic Plan forecasts this expense by spreading the number of Quota Units over four years so that the business continues to return a profit. Although the

total capital cost of Quota Units is considerable, Kuti Co takes a measured approach to accumulate quota over time. Graph 4's positive profit trajectory over time is associated with the higher financial returns from having a higher quota. As such, the fourth year's annual capital expenditure is less than 20% of the first year's capital investment. This suggests that by 2025, should Kuti Co achieve its 25% Quota Units target, it will generate close to $500,000 annual profit (based on 2019 market prices), dependant on the market price of pipi in any year which currently is increasing. With these profits, Kuti Co intends to invest in other Ngarrindjeri ventures, such as other commercial fisheries, tourism and retail.



Graph 4 – Kuti Co's financial returns after the acquisition of quota units projected over 4 years (2020–2024) based on 2019 market prices (source: Kuti Co 2020)

Future Directions

As recognised under the Fishery Management Plan 2022, the Lakes and Coorong Fishery operates in a challenging multi-jurisdictional environment, subject to a variety of arrangements managed by State and Commonwealth government bodies, other authorities and Indigenous organisations. Collectively, these organisations are working to enhance the region's environment and protect its natural resources. This is inclusive

of commercial activity successfully and sustainably operating in tandem with the Ramsar listed wetlands.

Irrespective of all these management provisions, Ngarrindjeri are concerned about climate change and the impact it may have on their sea county (Ngarrindjeri 2006). In more recent years, Ngarrindjeri have observed changes to the environment and its ecosystems. They are concerned that bird breeding behavior is changing, the fruiting and flowering of their bush foods is changing, fresh water holes are drying up or turning salty and ancestral coastal camping places and middens are eroding by rising sea levels. They are worried that if nothing is done, not only part of Ngarrindjeri's cultural heritage will be lost, but their built livelihoods will also be impacted by climate change.

In the meantime, Kuti Co is striving to implement a tangible framework for the future, detailing steps and priorities to achieve empowerment for Ngarrindjeri people. Part of this framework is to develop an employment strategy to develop the capability and capacity of the available Ngarrindjeri workforce. As Kuti Co continues to grow its operations, the enterprise is forecast to support 30 meaningful jobs and development opportunities for the Ngarrindjeri community (Kuti Co 2020). The strategy will be designed in consultation with Ngarrindjeri community to keep Ngarrindjeri people involved in the business of Kuti Co.

Another part of the strategy is to invest in and advance the business. Kuti Co is investing in equipment which will improve and increase the efficiency of pipi harvesting. Kuti Co also seeks to participate in fisheries management and establish mechanisms to undertake fishery and ecosystems research. In addition, Jawun will continue to support secondments to Kuti Co with priority in marketing and communications to develop product branding and marketing collateral.

Ngopamuldi hopes the commercial success of Kuti Co can advance additional enterprise opportunities that support Ngarrindjeri economic independence. In addition to increasing its quota in the pipi fishery, Kuti Co is interested in participating in the Fin Fishery, developing a processing plant and establishing tourism and retail enterprises that will bring benefit to the Ngarrindjeri community.

Throughout Kuti Co's journey, new and emerging opportunities have strengthened its reach in the Lower River Murray region and expanded its brand nationally. Opportunities are arising for increased product distribution and sales with nation-wide leading supermarkets, and Kuti Co continues to develop its product offerings, working with revered Australian chefs to develop recipes and prototypes that integrate the bush foods endemic to Ngarrindjeri's Sea Country.

In December 2019, GPCo launched the Kuti Shack, a local beachside café in the sand dunes of Goolwa. Kuti feature as a star ingredient on the menu. The Kuti Shack provides employment, and traineeships to the Ngarrindjeri community and importantly, continues to highlight the importance of Kuti in Ngarrindjeri culture (Kuti Co & Jawun n.d.).

Community Benefit

> *We operate differently. Our profit isn't in our bank account, it's in Ngarrindjeri people. The goal is giving our people the skills to improve their lives through sustainable businesses and jobs on our country. The emphasis is on not forgetting where we've come from, and not leaving anyone behind* (Derek Walker, CEO Kuti Co).

Working in partnership, GPCo and Kuti Co have transformed a traditional staple from being sold exclusively as bait to being a sought-after premium seafood. Kuti Co is fulfilling Ngarrindjeri's plan for Sea Country. Kuti Co provides equity and an avenue for Ngarrindjeri people to sustain their cultural practices and knowledge associated with the harvest, trade and consumption of pipi (ILSC 2020). Kuti Co already generates significant economic, social, environmental and cultural benefits for the Ngarrindjeri people.

Indicators of Success

The key success factors for this fishing enterprise, aside from the determination and coordination of key First Nations organisations in bringing Kuti Co to fruition, are the integral roles of businesses like GPCo in engaging Kuti Co under a commercial agreement and agencies like the ILSC in granting funds to establish their business venture. As a result, in less than three years, Kuti Co has successfully secured a significant share in the pipi industry and is projected to increase this to 25% by 2025.

In review, this case study demonstrates that:

- Subject to water quality and flows on pipi recruitment and market prices, populations of pipi in the Coorong and Lower Lakes are large, good quality and sustainable.

- Fisheries can operate sustainably across different land tenure, including protected conservation areas and non-exclusive native title.
- First Nations organisations have the capability to successfully participate in the primary industry fishing sector.
- The role of First Nations organisations in providing a variety of services and expertise was essential to establishing Kuti Co's business, including negotiating with industry and government agencies, providing training and seconding specialist sets of skills.
- The role of businesses, such as GPCo, in successfully securing a commercial partnership with willing First Nations organisations is ideal for development and is beneficial for both parties.
- The role of government agencies, such as the ILSC, is essential to resourcing the venture and support capacity building, including fisheries expertise.
- Government agencies, such as NIAA, through their Ranger programs are supporting not only cultural and environment values but also sustainable economic development.
- Kuti Co's co-ownership model integrates Ngarrindjeri's native title interests with its business needs and builds its capacity through training and projects.
- Kuti Co is a profitable venture and revenue is not only being reinvested into community development for the benefit of Ngarrindjeri people but also contributes to gross state production.
- With appropriate support, First Nations can develop a profitable business in a short timeframe.

YALLALIE DOWNS AND NOONGAR LAND ENTERPRISE GROUP

Agricultural Development in the south west of Western Australia

Acknowledgements

ANU pays respects to the Noongar Traditional Owners of the land and waters located within Noongar Boodja (land), south west of Western Australia. ANU also acknowledges the invaluable contributions of the case study partners, Beemurra Aboriginal Corporation and Noongar Land Enterprise Group.

Brief Overview

Yallalie Downs (Yallalie) is the first Aboriginal-owned farming property in Western Australia to manage a cattle backgrounding enterprise. Clients pay a fee for their cattle to graze on Yallalie's pastures to increase their body weight and improve their condition ready for the market (see Image 15).

The 1,242-ha freehold property is located north of Perth on the traditional lands of the Yued language group who are part of the Noongar nation. The property is owned and operated by the Beemurra Aboriginal Corporation (Beemurra). Beemurra was established in 1998 out of a family's interest to develop a farming business to support local enterprise development in the Yued community. Beemurra has been operating the property since 1999 and in 2001, the ILSC divested the freehold title to Beemurra.

Beemurra is a member of the Noongar Land Enterprise Group (NLE). NLE is an Aboriginal led, incorporated not-for-profit grower group. It currently supports six members and other grower groups with the development of culturally appropriate and innovative land-based enterprises such as: honey, sheep, bush foods, sandalwood, cultural tourism and social services.

Image 15 – Cattle backgrounding on Yallalie Downs' pastures (source: © Beemurra Aboriginal Corporation)

Regional Background

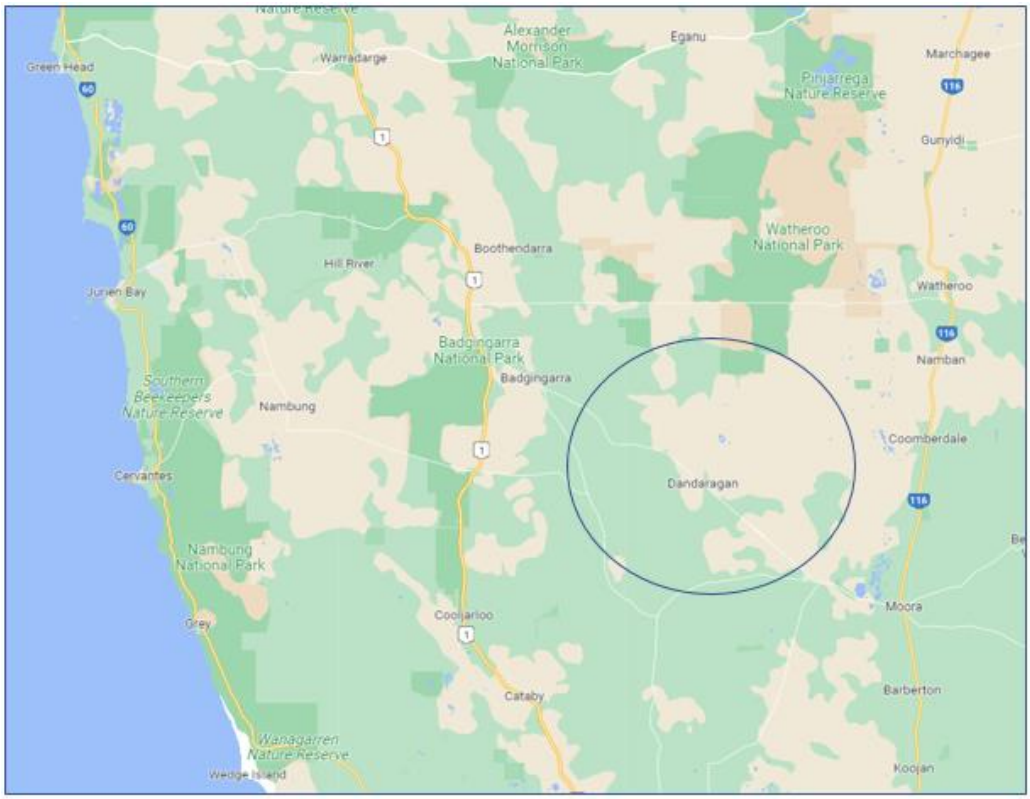
Location

NLE and Yallalie operate within the Wheatbelt region. The Wheatbelt spans about 155.4 million ha across the south west region of Western Australia.

Yallalie is located within the Dandaragan Shire on the traditional lands of the Yued who are one of 14 language groups of the Noongar nation (refer to Map 12). It is near the small town, Dandaragan (meaning good kangaroo country), which is located approximately 160 km north of Perth and 270 km south of Geraldton. A larger town, Moora, is about 35 km directly east of Dandaragan Township.

NLE operates across the traditional lands of the Noongar (meaning a person of south west Western Australia) (refer to Map 13). The Noongar people's traditional lands extend from Geraldton on the west coast to Esperance on the south coast[38].

[38] South West Aboriginal Land & Sea Council. Kaartdijin Noongar – Noongar Knowledge, Sharing Noongar Culture. About The Yued Region. Retrieved from: https://www.noongarculture.org.au/yued/



Map 12 – The general location of Yallalie Downs is circled in blue, between Moora and Badgingarra, approximately 170 km north of Perth[39]

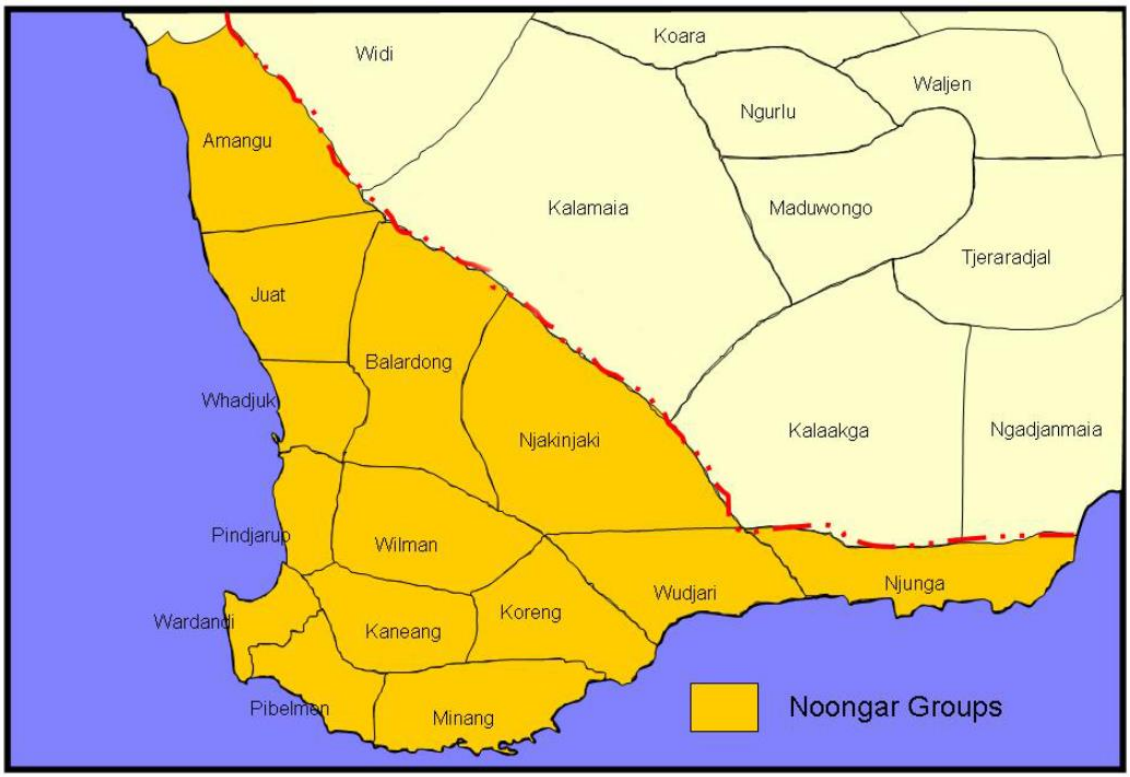
Colonial History and the Yued People

The region of the Yued (or Yuat or Juat) language group covers about 3 million ha directly north of Perth (refer to Map 13). Colonisation by the British in the early 1830s brought to the Yued's region violence, sometimes described as massacres, community displacement, segregation, assimilation and diseases, including whooping cough and cholera (Horizon Heritage Management 2020).

Although European settlers first visited the region in the 17th century, it wasn't until 1836 that it was colonized[40]. Settlers were attracted to the region's fertile land. Early on, the Yued people assisted explorers and settlers by providing advice on land cultivation and locating water, and others found employment on the developing farming properties. However, the Yued's living conditions were soon compromised and more often, they were dispossessed of their land and displaced to towns' fringes.

[39] Location of Dandaragan. Retrieved from: https://www.google.com.au/maps/@-30.5868068,115.8687057,10z

[40] Yued background. Retrieved from: https://en.wikipedia.org/wiki/Yued



Map 13 – Map showing the fourteen Noongar language groups in yellow. The Yued (Juat) estate is north of Perth[41]

In 1846 the town of Moora was settled and a Catholic Mission was established a short distance south at New Norcia (Horizon Heritage Management 2020). The Mission aimed to convert the Yued people to Catholicism and equip them with western farming practises. With the colonial government's introduction of policy in 1847 that placed children of single Aboriginal mothers at the New Norcia mission, mothers and children were moved from neighbouring settlements, including Moora, to New Norcia.

From 1890 to 1958, the lives and freedoms of Noongar people were further diminished subject to the introduction of governmental assimilation policies such as the *Native Welfare Act* and the subsequent *Aborigines Act 1905* that resulted in Aboriginal reserves being established on the outskirts of town. This included the Moora Reserve which became a permanent base for Yued people until it was dismantled in 1920 and its community displaced. Although the living conditions in reserves were poor and the Aboriginal residents had limited access to resources, they also facilitated a means for the Yued to maintain some traditions during government forced assimilation.

[41] Aboriginal groups of the south west of Western Australia. Retrieved from: https://en.wikipedia.org/wiki/Yued#/media/File:Noongar1.jpg

Shortly after the assimilation polices were implemented, most of the pastoral land north of Moora was sold to settlers and to the New Norcia monks. Farming at the New Norcia mission continued until 1913 using indentured Aboriginal labourers (Horizon Heritage Management 2020).

It was not until the 1960s that the general rights and living conditions for the Yued people improved due to the repeal of the *Aborigines Act 1905* and the closure of settlement camps. However, government policies that limited the Yued's freedoms to work and redistributed the Yued's land had left their community with high unemployment rates. Records from the 1970s show that, of the 260 Aboriginal people living in Moora, only 35 were employed and about 100 were seeking employment. Since the 1980s, the Yued community has been committed to resolving the unemployment issue and re-establishing cultural cohesion and economies within their communities.

Beemurra was formed in 1998 by the Barron family who wanted to establish a farming business and leave a legacy for future generations. Beemurra is a Wadjarri (or Wudjarri) word for the rock python that inhabits the Western Desert. Wadjarri is the language of Kevin Barron's grandmother. Mr Barron was born and raised at the Moore River Native Settlement, southwest of Moora, after his mother was forcibly removed from the Gascoyne region 900 km to the north[42]. He also spent several of his early years at the New Norcia Mission.

Beemurra started operating on Yallalie in 1999. Then in 2001, the ILSC divested Yallalie to Beemurra associated with Mrs Barron's Yued connection to Country. Initially, the corporation ran a small herd of goats. However, with no working capital, the property was leased out to local farmers who planted cereal crops and established agistments for sheep and cattle. However, the returns were persistently low and neither were viable in the long-term. Further, with respect to the subleasing arrangement, Beemurra effectively had no control over the operations on their property and saw their property being overgrazed by livestock.

In 2009, Beemurra became a member of the Aboriginal grower group, NLE. In 2014, members of the corporation explored the idea of running a small cattle backgrounding business. After gaining support in 2015 from several government agencies, Beemurra turned the property into a cattle backgrounding operation. Beemurra sowed its first

[42] Australian Government Office of the Registrar of Indigenous Corporations. Backgrounding cattle, foregrounding community. Retrieved from: https://www.oric.gov.au/publications/spotlight/backgrounding-cattle-foregrounding-community

perennial grazing grasses in 2016 and by 2017 had built new cattle stock yards and today, operates a profitable business.

Demographics – Yued people

The Yued population is estimated to be around 600 people. The population is spread across several locations in the region with the highest percentage (13.4%) living in Moora.

Yallalie is close to the Dandaragan Township, which has a population of about 400 people. About 4% of the Dandaragan population (18 people) identify as Aboriginal with the median age of 19 years[43]. About 26% of the total population is unemployed. The major industries of employment are in sheep, cattle and grain farming (30%) and fruit and tree nut farming (11.5%).

The larger neighbouring town, Moora, has a total population of 2,478[44]. About 12% of the Moora population (305 people) identify as Aboriginal with the median age of 26 years. Of those about 52% are employed full time, 21% are employed part-time and 21% are unemployed. Like Dandaragan, the major industries of employment are in sheep, cattle and grain farming (31% of total industries).

Geography and Climate – Yallalie Downs

The majority of the Wheatbelt across the southwest region of Western Australia has been cleared to be predominantly utilized for grazing and agricultural purposes, leaving small remnants of native Banksia woodland communities, which are both nationally significant and endangered (Horizon Heritage Management 2020; DoW 2019). The highest concentrations of rare and threatened native plants in Australia occur in the Wheatbelt region (Coates 1987).

Relevant to Yallalie, the Dandaragan region has a temperate climate with four seasons, including hot dry summers and wet cold winters. Daily temperatures are lowest between May and September, averaging 23ºC maximum and 17ºC minimum. Highest daily temperatures are between October and April, averaging 35ºC maximum and 26ºC minimum.

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[43] Australian Bureau of Statistics Dandaragan 2011 Census QuickStats. Retrieved from: https://www.abs.gov.au/census/find-census-data/quickstats/2011/SSC50203

[44] Australian Bureau of Statistics Moora 2011 Census Aboriginal and/or Torres Strait Islander people QuickStats. Retrieved from: https://www.abs.gov.au/census/find-census-data/quickstats/2011/ILOC50701102

Relevant to its location, which is west of Moora, Yallalie falls within a high rainfall zone (refer to Map 14). The total annual rainfall averages 440 mm with most rain generally falling between May and September and late summer between January and February[45].

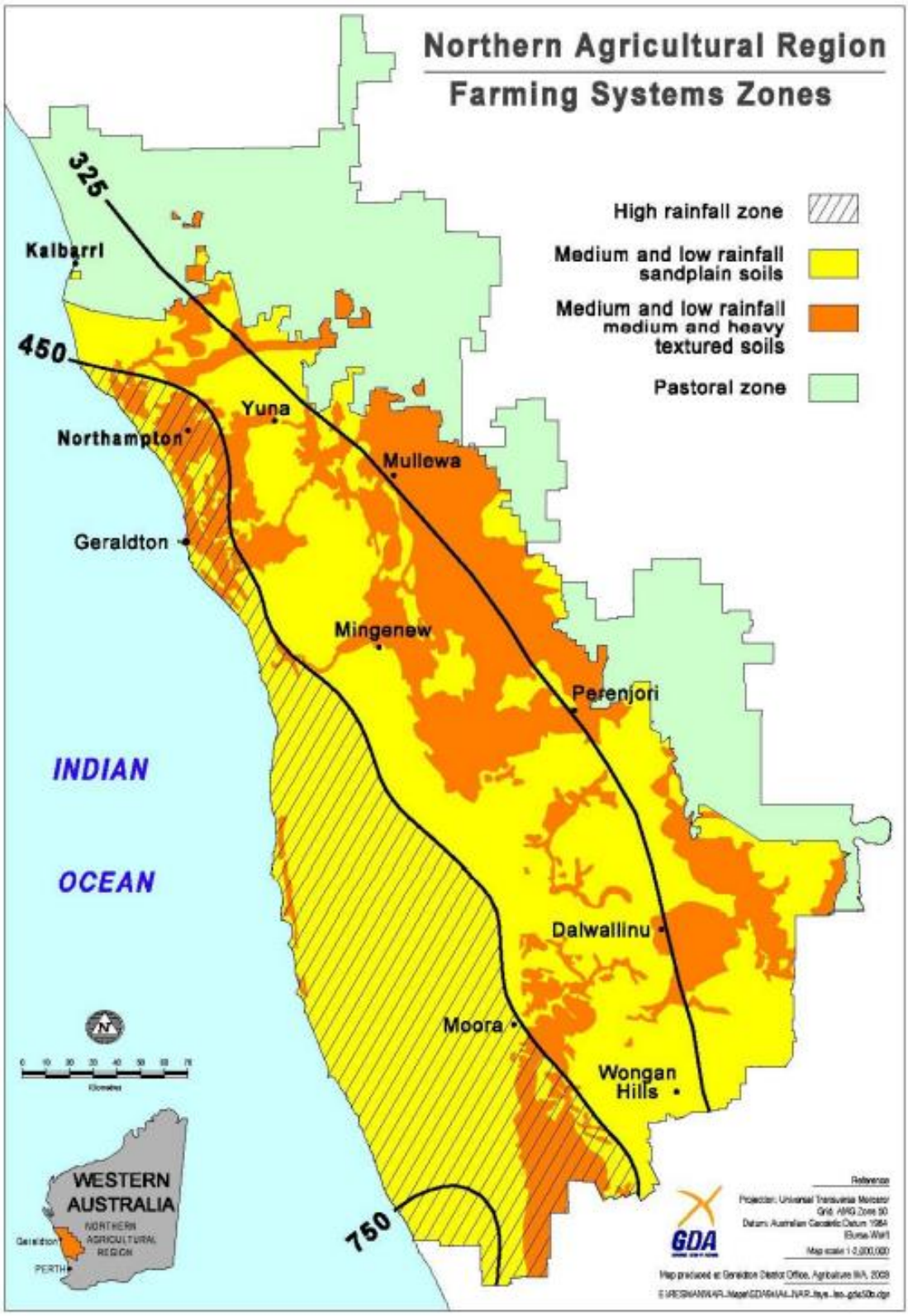
Water resources – Yallalie Downs

Annual rainfall in the Wheatbelt is reported to be stable, averaging about 340 mm over the past 60 years, though it fluctuates from year to year with natural variability (BoM & CSIRO 2019). Winter rainfall is reported to be very reliable, but summer rainfall is not.

The main water supply within Yallalie's region is from the Jurien (Dinner Hill subarea) groundwater aquifer as well from surface water capture, dams and rainwater collection (refer to Map 15). Surface water use in the Wheatbelt region is very low because most rivers are saline and seasonal (DoW 2014b). Yallalie is within the Nambung and Cataby Coastal tributaries catchment which has high salinity ranging between 1000 and 3000 mg/L TDS (DoW 2014b). To date the state government has not issued a surface water allocation plan for the catchment area.

Access to water allocations from the Jurien aquifer is managed through the Jurien groundwater plan that came into effect in 2010 under the *Rights in Water and Irrigation Act 1914*. It extends from the coast inland to Moora (refer to Map 15). Agricultural production, public water supply and mining are the major water uses from the aquifer (DoW 2010b). The total volume of water available to be taken annually from all groundwater resources in the Jurien aquifer is 94.6 GL. Of this total, 91.6 GL of groundwater can be allocated for licensing from all aquifers and subareas, with approximately 3.0 GL exempt from licensing for stock and domestic purposes (DoW 2010b).

[45] Australian Government Bureau of Meteorology (BoM) Climate Data Yallalie Basin. Retrieved from: http://www.bom.gov.au/jsp/ncc/cdio/weatherData/av?p_nccObsCode=139&p_display_type=dataFile&p_startYear=&p_c=&p_stn_num=008316



Map 14 – Map showing the high rainfall zone of the Northern Agricultural region farming systems. Yallalie is located west of Moora within the high rainfall zone (source: RPS Group 2014, p. 24)

Map 15 – Jurien Groundwater plan area showing the Dinner Hill subarea and the associated Midlands project area shown in red (source: Department of Water 2019, p. 2)

With respect to future water availability, the Western Australia Department of Water (DoW) reported that in 2010, there was approximately 64.4 GL from all resources available to new users from the Jurien aquifer. In 2010, the Western Australia Department of Water (DoW) also forecast that future groundwater use in the Jurien groundwater area would be constrained by the quality and quantity of groundwater available for licensing. However, in 2019 DoW issued an Allocation Statement for the Dinner Hill subarea groundwater supply in response to large-volume water licences. Its water supply potential is a focus of the state government's Midlands Groundwater and Land Assessment of the Water for Food program that will contribute to increasing the state's irrigated agriculture potential (DoW 2019). As a result, the allocation limits that were in place in 2010 increased in 2018 by 22% from 12.6 GL to 16.2 GL per year within the Dinner Hill subarea of the Jurien aquifer and are regarded by DoW to be within sustainable levels.

DoW (2019) also reports that fresh groundwater in the Jurien aquifer is limited. Some areas of the aquifer have high salinity ranging between 500 – 3,000 mg/L TDS (DoW 2014b). Additionally, while groundwater levels in Dinner Hill had been rising since the 1970s because of increased rainfall recharge following clearing of deep-rooted native vegetation in the 1960s, groundwater levels in the Dinner Hill area have declined 13 metres since 2000 (DoW 2019). DoW predicts that the water level will further decline by one third by 2030 due to climate change, which may impact primary production in the future and limit the prospects of farmers wanting to diversify.

Yallalie Downs Cattle Backgrounding

Backgrounding refers to the grouping and acclimatisation of animals prior to entry into a feedlot or an intensive finishing system[46]. The practice delivers significant production benefits including improved socialisation and feed intake and reduced health issues. Each of these benefits result in increased weight gain on-feed and increased beef productivity.

Backgrounding is a specialised service for clients who do not have these facilities or resources on their cattle grazing stations. It requires careful management, both with the cattle, including rotational grazing practises to sustain quality pasture grasses and with the client, relevant to their cattle's varying needs. Also, backgrounding can enable clients to hold out for peak market prices. Beemurra has been receiving cattle for backgrounding since Yallalie's first perennial pastures were established in 2016.

Beemurra's Corporate and Governance Framework

Yallalie Downs Land Tenure: Freehold

The 1,242 ha of freehold land within the Dandaragan Shire was divested through a grant from the ILSC to the Beemurra in 2001.

Business entity: Beemurra Aboriginal Corporation

Beemurra was incorporated in 1998 out of the interest of developing a family farming business to support local enterprise development in the Yued community. It is registered under the CATSI Act.

Beemurra has a small board of seven family members who are the Traditional Owners of the area. The board includes the Founding Director, a Business Manager, Secretary and four other Directors.

Beemurra's Development Framework

Department of Primary Industries and Regional Development (DPIRD)

Beemurra's management acknowledge that when it became incorporated in 1998, it had limited skills in running a business, and that it took about ten years to build its capacity. This was achieved with support from various agencies including from DPIRD.

[46] Meat & Livestock Australia. Backgrounding. Retrieved from: https://www.mla.com.au/research-and-development/feeding-finishing-nutrition/Lotfeeding-intensive-finishing/backgrounding/

After making its decision to participate in the cattle background industry, Beemurra engaged DPIRD in 2014 to assist with developing the industry on Yallalie.

DPIRD manages the Aboriginal Economic Development (AED) Program through the Department's Agriculture and Food division. The AED Program aims to support First Nations economic development opportunities[47]. This is done by building local capacity and supporting new businesses and jobs for First Nations people through primary industries and strategic regional projects and state priorities, such as the South West Noongar Settlement (Noongar Settlement).

Through DPIRD the AED Program assisted Beemurra develop a strategic plan and business model to support cattle backgrounding on Yallalie. It also supported livestock training and governance training for Beemurra Directors and their participation in industry workshops to network and exchange ideas. The AED Program also assisted Beemurra with its successful 2015 application to the ILSC for funding toward infrastructure development.

Office of the Registrar of Indigenous Corporations (ORIC)

Beemurra is registered under ORIC. As well as assisting corporations, such as Beemurra, to comply with associated law, ORIC also supports free governance training. In 2015, two of Beemurra's Directors participated in ORIC training to improve their skills in running and governing their corporation.

Indigenous Land and Sea Corporation (ILSC)

In addition to the grant of land to Beemurra in 2001, the ILSC has also granted nearly $200,000 to fund infrastructure development on Yallalie. In 2015, with assistance from DPIRD and ORIC, Beemurra submitted a successful funding bid to the ILSC for infrastructure improvements on Yallalie, including sowing perennial pastures and constructing cattle yards, fencing and a watering system.

Today the ILSC is doing a project in partnership with DPIRD that supports Yallalie maintain its perennial pastures and the installation of a water treatment and storage system.

[47] Department of Primary Industries and Regional Development. Agriculture and Food. Aboriginal Economic Development. Retrieved from: https://www.agric.wa.gov.au/aboriginal-business-development-0?nopaging=1

Noongar Land Enterprise (NLE) Group

Beemurra became a member of the NLE in 2019. NLE is a not-for-profit leading Aboriginal grower group that supports development of culturally appropriate and commercially sustainable land-based enterprises.

Based on an initial alliance among six Aboriginal farms in 2014, the NLE became incorporated in 2017 with the intent to realise the interests of its farming consortium (NLE 2019). To assist in its formation, in 2017 DPIRD granted two years of funding that supported NLE establish its governance, the election of its executive positions, strategic planning and incorporation.

NLE aims to be positioned not just as Western Australia's South West Indigenous land management organisation but as an example of entrepreneurial Noongar best practice conducted through cross-cultural engagement with government and the wider community. As experience and assets develop, NLE will make available an information and education hub from which to inspire and support other First Nations groups to make positive changes to their lives, both in Western Australia and further afield. Importantly, it will showcase what is possible when two cultures model the benefits of working together (refer to Figure 11).

NLE's approach is to strategically collaborate and be commercially focused to:

- create pathways for investment
- be a strong voice for policy change
- focus on achievable actions and programs
- create opportunities for collaboration between various NLE members.

NLE does this through a set of objectives and business priorities including supporting economies of scale, supplying business analytics, keeping up to date with information on farming practices, advocating issues, attending training and education in farming, researching governance and commercial business modelling. Its development framework is principled on looking after Country, cultural connectivity and rejuvenation, and wellbeing and healing.

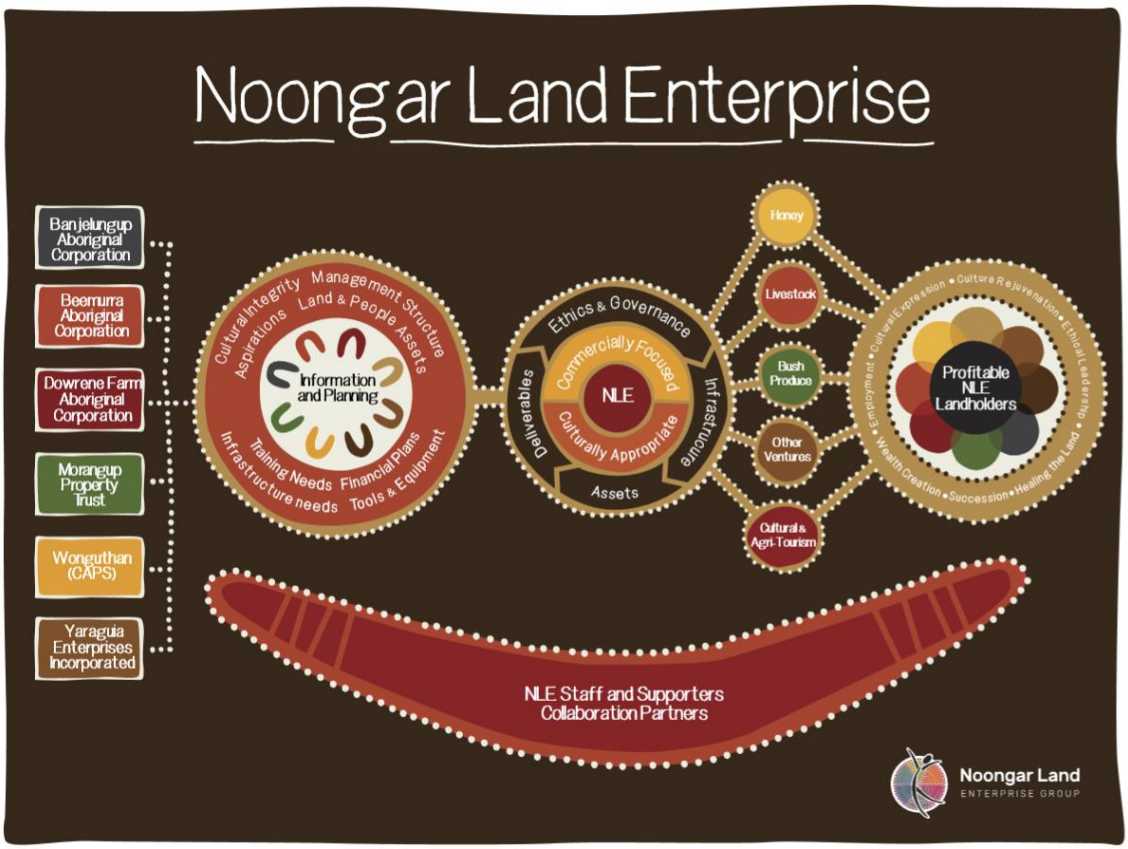


Figure 11 – Schematic of Noongar Land Enterprise Group members and grower group development process (source: Noongar Land Enterprise Group)

Structure

The structure of NLE includes the Board made up of a Chairperson, Vice Chairperson, Treasurer and up to six board members. The role of the Board is to deal with the interests of its members and to advance NLE toward a self-sustainable business model. NLE staff include the Chief Executive Officer, a Senior Project Officer and a Finance Manager.

The CEO is currently funded by the Macdoch Foundation and a silent philanthropic organisation based in Western Australia. Prior to this the ILSC funded the CEO position for one year. The Senior Project Officer is funded by Lotterywest.

Members

The NLE has six-member organisations:

1. Banjelungup Aboriginal Corporation (near Bremer Bay)

2. Beemurra Aboriginal Corporation (near Dandaragan)
3. Daniels Morangup Property Trust (near Toodyay)
4. Dowrene Farm Aboriginal Corporation (near Cranbrook)
5. Wongutha Christian Aboriginal Parent-Directed School (CAPS) (near Esperance)
6. Yaraguia Enterprises Incorporated (near Beverley).

In 2017, NLE secured funding from the Farm Co-operatives and Collaboration Pilot Program, that is managed by the Southern Cross University, for its project, Noongar Land Enterprise Group – Driving the Success of Innovative and Mainstream Aboriginal Primary Production[48]. The project assessed the capability of its members' land and people, to move from passive land management to successful land use enterprises. This included investigating members' economic, cultural, social and environmental aspirations. Outcomes of the project are summarised in Table 7 and identified key business enterprises and aspirations, including sheep and cattle, bush foods, aquaculture, cultural tourism, sandalwood and carbon trading.

[48] Noongar Land Enterprise Group overveiw. Retrieved from: https://www.noongarlandenterprise.com.au/

Table 7 – Information relating to the key business enterprise and aspirations of the Noongar Land Enterprise Group six landholding member groups in southwest Western Australia[49]

ORGANISATION	LOCATION AND AREA	KEY SOCIAL/CULTURAL ASPIRATIONS	KEY BUSINESS ENTERPRISE AND ASPIRATIONS
Banjelungup Aboriginal Corporation	Bremer Bay (852 hectares)	Rejuvenate sense of place	Sheep and cattle
		Respite, safety, contentment, belonging	Bush foods
		Experience Noongar culture	Aquaculture
		Connecting family	Cultural tourism/accommodation
		Protecting and sustaining environment	Honey
Dowrene Farm Aboriginal Corporation	Cranbrook (712 hectares)	To be a cultural hub and rejuvenate culture	Sheep enterprise
		Reconnect Noongar people with country	Sheep training centre
		Provide shelter, recovery and respite	Bush foods
		Provide educational opportunities for students	Sandalwood
		To be self sufficient	Honey
			Cultural tourism
Yaraguia Enterprises Incorporated	Beverley (840 hectares)	Land rehabilitation / healing country	Sandalwood
		Healing people	Social services – healing, culture awareness
		Experience and rejuvenate culture	Biomass for renewal energy
			Carbon trading
			Honey
Wongutha CAPS	Esperance (1040 hectares)	Train and educate Aboriginal students	Aboriginal vocational education and training
		Build capacity and empower Aboriginal students	Mainstream agriculture - sheep and cattle
			Bush food production
			Honey
Woolah Wah Land Aboriginal Corporation	Bakers Hill (604 hectares)	Respite	Bush food; Quandong
		Rejuvenation of cultural experience	Cultural tourism
		Protect cultural sites and share culture knowledge	Social services
		Spend time and strengthen family connections	Mainstream agriculture - sheep, cattle and cropping
			Honey
Woolkabunning Kiaka (Roelands Village)	Bunbury (227 hectares)	To be a healing precinct	Cattle agistment
		To be self sufficient	Contract workforce
		For young people to interact with seniors/elders	Horticulture, produce and bush food
		Cultural experience - Collie River	Catering and accommodation
		Rejuvenation of culture	Tourism
			Honey

[49] Noongar Land Enterprise Group. Six NLE Landholding Groups in Western Australia. Retrieved from: https://www.noongarlandenterprise.com.au/landholding-groups

Projects and business investments

NLE regards the key factors to supporting landholders change from passive to active land management are:

- The community having ownership of, and control over decision making.
- Culture being central to the program; including an understanding of local context, history and community leaders.
- Local Indigenous staff working on the program or in the organisation.
- Practising good corporate governance.
- Establishing trusted partnerships.

NLE members are interested in diversifying their business ventures and looking to NLE to provide cooperative support to achieve this. NLE acts to provide opportunities to its members through scales of economy, information sharing, trialling and testing new techniques, accessing markets and assisting with product branding. This is being delivered through several on-ground projects, including:

- Boola Boornap – Native tree nursery – NLE's first commercial asset
- Ngooka Honey Project
- Bushfood – Wattleseed Project
- Yoordaniny –Bah Project

These are discussed in more detail under the NLE business framework.

Business Framework: Beemurra and Noongar Land Enterprise Group

Market Background

The Wheatbelt region covers an area of around 15.5 million ha, of which 58% is under agricultural production (BoM & CSIRO 2019). The Wheatbelt's agricultural industry is the state's main producer of broad acre cereal crops and contributes to the production of canola, olives, vegetables, wine grapes, honey, citrus fruits and livestock (cattle and sheep). The Wheatbelt Development Commission (WDC) reported in 2021 that primary industries in the Wheatbelt contributed $3.7 billion annually to the Australian economy. It also identified that the Wheatbelt is well positioned to capitalise on its competitive advantages with respect to renewable energy, natural resources, close proximity to Perth, intersection of six key transport routes, access to five ports and significant availability of affordable freehold land (WDC 2021).

Dandaragan and Moora, for which Beemurra contributes to, produce broadacre grains, manage animal husbandry activities (horses, sheep and cattle all on pasture), raise

fruit crops and sell horticultural products[50]. Agriculture covers an area of 384,601 ha in the Dandaragan Shire. Its primary industries contribute $239.6 million to the economy, which accounts for 31.56% of the Shire's total economic output and nearly 7% of the Wheatbelt's total economic output[51]. The gross economic contribution is more than twice that reported ten years earlier, suggesting a positive trend in agricultural development. In 2010, the Dandaragan shire contributed $113.1 million to the total gross value of agriculture production. Comparative to other regions of the Wheatbelt, the strong water supply security of these agricultural areas is a key advantage.

Beemurra

Infrastructure assets

Beemurra has been beef backgrounding for six years after it sowed the first 90 ha of perennial pastures on its property in 2015. Since then, Beemurra has achieved its five-year plan to sow paddocks covering an area of 500 ha; nearly half of its property.

Beemurra started operating with 200 head of cattle and today operates with up to 600 head on its 500 ha of perennial pastures. Beemurra is working toward achieving the full capacity of the property which is operating up to 1000 head of cattle on 1000 ha of perennial pastures.

Infrastructure includes two houses, a sheering shed, a workshop, sheep and cattle yards and shelters, fencing and a watering system, most of which was funded through the 2015 ILSC grant. Free labour and use of equipment were provided by neighbouring properties to sow Yallalie pastures. Once sown, and using rotational grazing systems that prevent overgrazing, pastures are self-sustaining. Pastures do not require irrigation due to the reliable seasonal rainfall in the area. Additionally, the property has natural soaks and ample surface water (see Image 16).

Water for stock and domestic purposes does not require a water extraction licence and, therefore, is accessed freely from one licensed bore. Water quality is measured each year to check salinity levels relevant to maintaining cattle health.

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[50] Australian Bureau of Statistics National Regional Profile: Dandaragan (S) (Statistical Local Area) 2010. Retrieved from: https://www.abs.gov.au/AUSSTATS/abs@.nsf/Previousproducts/525052590Industry12004-2008?opendocument&tabname=Summary&prodno=525052590&issue=2004-2008

[51] Remplan. Economy, Jobs and Business Insights - Dandaragan. Wheatbelt Development Commission. Retrieved from: https://app.remplan.com.au/wheatbeltregion/economy/summary?state=lm8NTG1rlFkYlMvhA08va4TKIbS0WcLMD

Image 16 – A cattle watering hole on Yallalie Downs (source: © Beemurra Aboriginal Corporation)

Financial analysis

Table 8 presents Beemurra's income and expenditure data submitted to ORIC for four years (2015–2016 to 2016–2017 and 2019–2020 to 2020–2021). Total income in 2015–2016 of $240,265 consisted of lease income ($42,029), ILSC grant ($196,941), NLE contribution ($2,500) and payroll deduction (-$1,205). The major expenses in 2015–2016 were contractors ($19,159), capital purchase ($148,625) and infrastructure improvements ($25,366).

Contrary to 2015–2016, total income for 2016–2017 without any lease income was $47,698 that consisted of cattle agistment ($15,545), cattle backgrounding ($29,206), ILSC grant ($238), payroll ($1517) and contribution ($1,193). These figures show that Beemurra's total income was mainly attributed to its backgrounding operations (61%) and cattle agistment (33%). These figures also show that by 2017, Yallalie started producing a small profit ($2,938).

This is based on operating 200 head of cattle on only 200 ha of its 1,242-ha property. Without accounting for expenses this equates to about $200 per pastoral ha used for backgrounding purposes.

Table 8 – Income and expenditure of Yallalie in four years (2015/16 to 2016/17 and 2019/21 to 2020/21)

	Cattle agistment income	Cattle grounding income	Sheep income	Total income*	Total expenses	Profit/Loss
2015-2016	$0	$0	$0	$240,265	$237,501	$2,765
2016-2017	$15,541	$29,206	$0	$47,698	$44,759	$2,938
2019-2020	$9,364	$84,765	$0	$120,497	$100,681	$19,817
2020-2021	$0	$22,838	$5,034	$60,236	$61,256	-$1,020

* Total income includes ILSC grant, NLE contribution, capital interest, and loans.

Prior to this, income from leasing the property provided $42,029 per year. Comparatively, leasing provided only $42 per ha when using 1000 ha of the property, implying that backgrounding is a more profitable commercial land use option.

The total expenditure during the 2016–2017 reporting period was $44,759. Expenses went to the lessor cost of contractors, vehicle registration and fuel, insurance, utilities, cattle expenses and the higher cost of annual land rates and capital expenses.

By 2018, Beemurra was accepting new clients and was able to increase its backgrounding rates, which Beemurra advises has gradually increased cashflows. In 2019–2020, its profit increased to $19,817. However, in 2020–2021 its income reduced by 50% from $120,497 to $60,236. The major loss in income was due to reduction in cattle agistment income from $9,364 to zero, cattle backgrounding from $84,765 to $22,838 and ILSC grant reduction by about $2,000, though it received sheep income of $5,034. Consequently, Beemurra faced a loss of $1,019 in 2020–2021.

According to ABARES, prices of beef in the last of couple of years increased by about 60% and are expected to be about 40% higher than the early 2021 figure[52]. Assuming only a 30% increase in cattle backgrounding, income will increase from $22,838 to $29,690 and, assuming other income and associated expenditure remain constant, the total income for 2022 will be $67,087 and this will result in a profit of $5,862. This figure indicates that, should Beemurra continue to develop the area of perennial pastures on its properties and sustain enough clients, its backgrounding business presents a profitable agricultural investment over the longer term and is a better commercial option than leasing the land to third party operators.

[52] Department of Agriculture, Water and the Environment, Data. Retrieved from: https://www.awe.gov.au/abares/data

Noongar Land Enterprise Group

Financial Analysis

Based on its 2020–2021 audited financial report, NLE's revenue in 2019 increased fivefold in 2021, suggesting that the NLE is in a sound financial position.

Industry investments

Boola Boornap – Native tree nursery

The Boola Boornap native tree nursery has provided NLE and its members with its first large scale business activity. In 2020, NLE purchased the WA Farm Trees (native tree nursery) located in Northam, about 100 km east of Perth. Its purchase was funded by the two international philanthropic organisations, COmON Foundation and Commonland.

Prior to its purchase, NLE engaged Venture Consultants to complete due diligence on the property which reported that the business was commercially sustainable and indicated, using its business modelling, that the tree nursery would break-even after about two years. NLE then entered a special licence arrangement with the previous owner that allowed NLE to start the seedling propagation process prior to settlement. Shortly thereafter, settlement was reached in December 2020 with pro-bono legal support (valued over $90,000) and has since delivered over 600,000 seedlings to customers.

Because the property was purchased outright, it could be used as collateral against a bank loan, which was successfully obtained to provide cash flows to operate the business. In addition to the bank loan, the ILSC granted in 2022, $275,000 to NLE for the upgrade of equipment at the nursery and the WDC granted $100,000 to NLE to expand the capacity of the nursery.

The primary purpose of investing in the nursery is to raise revenue so that NLE is less reliant on grants and becomes economically self-sustaining. Additionally, the nursery provides employment to over 30 local Aboriginal people, with approximately ten people working on any given day. Profits from the nursery self-funds its employees.

The nursery is intended to also lead to further opportunities related to land restoration and carbon capture. So far, 500,000 seedlings have been planted on Noongar land to restore country and to capture carbon. Other benefits of the nursery have included NLE

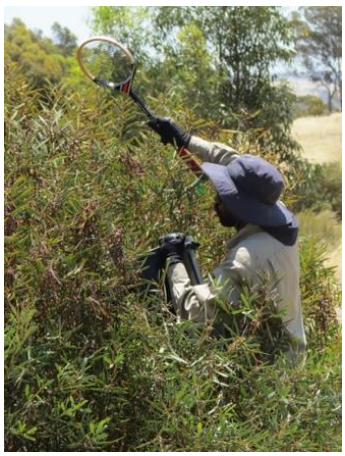
raising its profile and demonstrating to Government and the private sector that NLE and its members have the capacity to deliver culturally appropriate, commercially sustainable small to medium size businesses.

Ngooka Honey Project

The Ngooka Honey project commenced in 2019. NLE works with a local Noongar beekeeper who manages about 40 working hives and, together with the Centre for Research for Honey Bee Products have supported:

- Twenty-two NLE members with training and formal assessment in at least one session of vocational training and 10-12 participants in regular beekeeping training; and
- Floral Mapping and Honey Quality Testing and Analysis at ten properties, including at some NLE members' properties (Knight et al. 2020).

Bushfood – Wattle Seed Project



In late 2020, NLE undertook a pilot Wattle Seed harvest at two locations: Avondale Park near Beverley (Yaraguia Enterprises Incorporated) and at a private property near Dandaragan (via Beemurra). Over 6-8 days and with 4-6 crew, approximately 350 kg of Wattle Seed was collected. The estimated value of the harvest was $35,000 based on $100 per kg for the total 350 kg of Wattle Seed collected. This excludes the further sample later provided by the NLE member Banjelungup Aboriginal Corporation. Using the product from just two locations, wattle seed harvesting seems to be lucrative with respect to low overhead infrastructure costs and labor, generating gross income estimated at $4,375 per day when calculated over the maximum of eight days of harvesting.

Noongar Land Enterprise Group Members

Excluding Beemurra, which is discussed earlier, activities of other NLE members are briefly presented.

Banjelungup Aboriginal Corporation

Banjelungup Aboriginal Corporation (Banjelungup) has been trading for 19 years, since it was registered by ORIC in 2003. In 2011, the ILSC divested to Banjelungup the Dillon Bay Farm and Swamp River Farm, both near Bremer Bay, which is about 500 km southeast of Perth, near Albany. Banjelungup currently operates sheep on its properties and is interested in diversifying its enterprises in native bush foods, aquaculture, cultural tourism and honey production industries.

Dowrene Farm Aboriginal Corporation

The Dowrene Farm at Cranbrook was bought by the ILSC in 1999 and divested to the Dowrene Farm Aboriginal Corporation in 2009. After leasing the property for nearly a decade until 2018, the corporation started operating sheep on the property and currently runs about 1,000 head of ewes. Today the sheep farm successfully generates a 100% lambing rate. Like other NLE members, it is looking to diversify its business. With the support of NLE, it is currently trialling native bush food production.

Though it is currently successfully operating, it has faced challenges, notably with generating cash flows to undertake property development. Land divested by the ILSC to a corporation generally cannot be sold, making it difficult to secure bank loans. However, in 2017, after a change of policy to temporarily lift relevant caveats, the farm successfully applied for finance from Indigenous Business Australia (IBA). IBA was created by the Australian Government to assist and enhance the economic development opportunities of First Nations by supporting business finance and partnerships. The Dowrene Farm Aboriginal Corporation was awarded a loan that it gifted to its subsidiary for-profit Bonshore Sheep Trust to run the sheep enterprise on its farm. Dowrene Farm Aboriginal Corporation is the only beneficiary of the Bonshore Sheep Trust.

Wongutha Christian Aboriginal Parent-Directed School (CAPS)

Wongutha CAPS is a non-government Christian Boarding School for Year 11 and 12 Aboriginal vocational students who predominantly come from remote towns and communities throughout Western Australia. The school is situated on a 405 ha farm, about 30 km north of Esperance. Prior to this, from 1954, it was an Aboriginal mission. By the late 1970s, its governance

changed to include greater Aboriginal representation on the Board. In 1990, the mission engaged CAPS to take over the training program and in 1993, it was given the deed and land assets. CAPS was originally formed earlier in 1981 by concerned Aboriginal parents before taking over Wongutha in 1990.

Today, Wongutha CAPS supports vocational training to between 60-70 male and female students alongside its sheep and cattle industries. Vocational education courses include automotive, construction, engineering, hospitality, horticulture, conservation and land management and agri-foods operations. Like other NLE members, it seeks to diversify economies and student training prospects to include native bush foods and honey production. “Training for Life” is the approach taken to engaging with students, and so work ethic, taking responsibility, self-respect, choosing respect and other skills to live well are built into how Wongutha CAPS is run.

Yaraguia Enterprises Incorporated.

Yaraguia Enterprises Incorporated began operating in 2006. It is owned by the Ballardong Noongar Traditional Owners. In 2008 the ILSC divested an 837-ha property (formerly known as Avondale Park) to the Ballardong people. Known today as Yaraguia Farm, the property is located in the Shire of Beverley, 122 km east of Perth.

Yaraguia Farm currently grows crops, grazes sheep and engages in forestry, farming native sandalwood. Its farming practices are focused on regenerative processes to restore biodiversity values that have been negatively impacted after many decades of intensive grazing practices. Regeneration processes have been done in partnership with Greening Australia and the Avon Catchment Council and included strategic revegetation, removal of sheep from planting areas and the eradication of weeds.

Replanting of native vegetation has been ongoing since 2008 and in 2013 traditional Noongar burning practices were reintroduced to remove and manage invasive weed species across the farm. Using traditional burning practices has shown to significantly reduce several invasive weed species, and has led to the regeneration of native grasses and improved soil health[53].

Yaraquia Enterprises is now working though NLE in pursuing other industry interests, including providing social services that are based on healing and cultural experiences

[53] Mooditj boodja. The Yarguia Karl (Fire) Story. Retrieved from: https://www.mooditjboodja.com.au/yaraguia-karl-fire-story

on the property, bush food industries, including medicines and participating in carbon sequestration and trading.

Future Directions

Beemurra, as with all the NLE members, have been actively participating in primary industries through various grants and other agency support. More recently, however, NLE is providing a vehicle for Aboriginal grower groups to explore culturally appropriate and economically viable opportunities to diversify their business interests at the same time as looking after the health of Country. As noted in NLE's Strategic Plan, the journey to developing these interests will take place over many cycles, with each cycle growing in strength and experience (refer to Figure 12).

The future directions of NLE are centred on developing industry interests; ongoing access to capital and building partnerships and networks; and ensuring the economic sustainability of NLE operations.

One strategic initiative going forward that will benefit Aboriginal growers not only in south west Australia but also nationally, is NLE's Yoordaniny-Bah project. A major component of the project is the establishment of a Noongar "Innovation Hub" for the native bushfoods industry. To date a comprehensive strategic business case has been developed that includes several recommendations and options for the structure and operational functions of the proposed Innovation Hub.

Figure 12 – Schematic representation of the Noongar Land Enterprise Group providing the platform to empower commercially focused and culturally appropriate industry development delivered through four key operational pillars that set strategic direction and initiatives (source: Noongar Land Enterprise Group 2019)

South West Noongar Settlement

Of further interest, will be the implications of the landmark Noongar Settlement on Noongar participation in primary industries in the future. As background, in 1997, the Noongar people made six separate native title claims that resulted in a settlement involving six identical Indigenous Land Use Agreements (ILUAs) in 2015 that were registered with the Native Title Tribunal in 2018 (refer to Map 16).

Map 16 – Map showing the six Noongar native title claim areas, including the Yued[54]

Known collectively as the Noongar Settlement, each ILUA is an agreement by the Western Australian Government and the South West Aboriginal Land and Sea Council (SWALSC), and respective Noongar groups, the Yued, Whadjuk, Gnaala Karla Booja, Ballardong, South West Boojarah and Wagyl Kaip and Southern Region (Horizon Heritage Management 2020). The Noongar Settlement involves around 30,000 Noongar people and covers an area of approximately 200,000 km^2 in the southwest of Western Australia.

[54] South West Aboriginal Land and Sea Council map of native title claim areas. Retrieved from: https://www.noongar.org.au/land-base-map

The Noongar Settlement commenced only recently in February 2021. In March 2021, the initial Noongar Boodja Trust (NBT) was established to manage and hold all assets from the settlement, and the first historic payments were made by the Western Australian government to the NBT. In exchange for the payment and provision of the benefits under the Noongar Settlement, the Noongar people agreed to surrender their native title rights and interests in respect of the Noongar Settlement area meaning that the future act processes will no longer occur within the area, because native title has been resolved.

The Noongar view is that the Noongar Settlement demonstrates Noongar peoples' strong relationship to their land, as reflected through the many components of the settlement's package, including the creation of the Noongar Land Estate and the recognition, in statute, of the Noongar peoples as the Traditional Owners of the southwest region[55]. The land base settlement (Noongar Land Estate) includes 300,000 ha of land allocated as reserve or leasehold and up to 20,000 ha of land allocated as freehold for cultural or economic development use.

The six ensuing Noongar Regional Corporations and a supporting Central Services Corporation are the major beneficiaries of the NBT. NBT will act as a charitable trust and maintain the trust capital (valued $46,850,000 over ten years) with a fixed percentage being distributed each year to the six Noongar corporations for associated cultural, social and economic programs. The Yued Aboriginal Corporation is currently in the process of appointing directors to formalize its board. However, the formal relationship between Beemurra and the Yued Aboriginal Corporation is still to be resolved by the Noongar, including the Yued. Nonetheless, the Noongar Settlement provides the potential for the Noongar to actively participate in the regional economy, including in agriculture, and achieve sustainable economic, social and cultural outcomes for their communities.

Community Benefit

At the local level, after securing Yallalie in 2001 and since establishing the backgrounding operation in 2015, Beemurra's returns have been slowly and steadily growing as the area of pasture increases and more cattle are being backgrounded. Building on this success, Beemurra is using Yallalie for community benefit including Youth Camps and AstroTourism.

[55] South West Aboriginal Land and Sea Council. Settlement Agreement: https://www.noongar.org.au/about-settlement-agreement

Beemurra is also a proud and active supporter of the local Dandaragan community. Beemurra contributes to Astronomy Western Australia's vision of creating an Aboriginal astronomy tourism trail. Yallalie hosts Aboriginal AstroTourism stargazing events that include talks from Elders about Aboriginal perspectives (see Image 17).

Image 17 – ABC link to Beemurra Aboriginal Corporation's Astro Tourism event
https://youtu.be/mcqVvqr9hk4

In addition, Beemurra hosts Youth Camps and a cultural healing space at Yallalie. Camps are for two to three days and are free for youth aged between 12 and 14. Camps promote leadership skills, raise cultural awareness and share agricultural knowledge. The goal is that after five years, with increased capacity and confidence, the youth will emerge as leaders ready to lead, deliver and organise future youth camps and drive a youth led commercial tourism potential at Yallalie.

At the regional level, NLE is supporting training, mentoring and industry exchanges to an emerging Aboriginal grower group. NLE is viewed as a significant national development to redirect the focus of Aboriginal land-based development into commercially successful enterprises.

> *The NLE is not a Trust or an Aboriginal Corporation: it is a hub for commercially driven and culturally inspired initiatives. It will actively pursue a progression away from Native Title and the Indigenous land estates, which have historically been held in trust for the benefit of Aboriginal people. These types of entities and systems have effectively impeded our aspirations to be commercially viable and successful on our own land.* NLE Chair, Balardong Noongar man, Oral McGuire.

Indicators of success

The key success factors for Aboriginal grower groups in the southwest of Western Australia, are not only the roles of agencies like RIRDC, ORIC and the ILSC in providing funding and other support, but importantly, the advent of NLE which provides a culture-based approach to economic development.

In review, this case study demonstrates that:

- After 15 years of limited support, Beemurra was able to turn its business around and make a profit within two years of receiving corporate governance training and funding to strategically plan and improve property infrastructure, which would not have been possible unless it took out a loan and be encumbered with debt.
- Cashflows are important to developing and managing any business operation. However, pastoral leases and land divested by the ILSC, can generally restrict access to capital from banks and therefore, any development or improvements to the agricultural investment, relies on grants and philanthropic support.
- The grant or divestment of land and pastoral leases is necessary for Aboriginal groups who would not otherwise have the capital to purchase freehold land and participate in primary production.
- Landholding groups need support to build capabilities and capacity to shift from passive participants to active and self-sufficient participants in primary industries.
- Active participation in primary industries, such as Beemurra's backgrounding enterprise, has greater benefits to the landowners in terms of economic, social and cultural outcomes, when compared to leasing out the land to third party operators and taking on a passive role that limits their decision making in how their land is used.
- Aboriginal grower groups, such as NLE, provide culturally appropriate tools and mechanisms to support and enable landholders to build their capacity and capabilities in industry.
- Groups like NLE serve an important role in supporting a cooperative of growers by enabling partnerships, creating supply chains with markets, trialling innovations, business development and sustainable agricultural practices and providing advocacy for its members.
- Agricultural development goes beyond mainstream primary industries and encompasses a range of land-based enterprises such as bushfoods production, botanicals, carbon farming and tourism.

- Agricultural development is inclusive of social, environmental and cultural capital and sustainable practices in terms of First Nations spiritual connection to the health of country and people.
- The South West Native Title Noongar Settlement may be an opportunity in the future to support groups secure land and undertake more primary industries.

CASE STUDY SUMMARY

The five case study's parameters and business overview are summarised in Table 9.

Table 9 – Case Studies Summary

Case Study Parameters					
Enterprise	**Location**	**Main production**	**Tenure**	**Production asset**	**First Nations Interest**
Delta Downs Station	Carpentaria Shire, Queensland	Beef cattle breeding and growing	Pastoral leases	405,000 ha across three pastoral leases; bore licences	Direct – 100% owned subsidiary
Desert Springs Farm	Ali Curung, Northern Territory	Horticulture production of watermelons	Aboriginal Land pursuant to Schedule 1 *Aboriginal Land Rights (Northern Territory) Act 1976*	1,200 ha of Aboriginal lands leased to third party for horticulture production; ground water licences	Indirect – property leasing and licensing arrangement
Kuti Co	Lower Lakes and Coorong, South Australia	Wild catch of pipi	Non-exclusive native title and fishing licence	15.82% of the total South Australian pipi fishery quota	Direct – joint venture between two First Nations owned businesses
Roebuck Plains Station	Broome, Western Australia	Beef cattle breeding and growing	Exclusive native title and pastoral lease	275,540 ha across pastoral and special purpose leases; water licences; export depot	Direct – 100% owned subsidiary
Yallalie Downs	Dandaragan, Western Australia	Beef cattle backgrounding	Freehold over ancestral lands	1,242 ha of broadacre farmland; bore licences	Direct - family ownership

Case Study Business Overview	
Delta Downs Station	The Delta Downs Station is an aggregate of three adjoining pastoral leases in Queensland's Gulf Country - Delta Downs, Maggieville Outstation and Karumba Downs totalling 405,000 ha. These properties support a beef cattle breeding and growing operation of around 40,000 to 45,000 head of cattle. The pastoral leases and enterprise are owned and operated by the Morr Morr Pastoral Company, a wholly owned subsidiary of the not-for-profit Kurtijar Aboriginal Corporation. Its members, the Kurtijar people, are the Traditional Owners of lands that include the pastoral leases.
Desert Springs Farm	Alekarenge Horticulture Proprietary Limited has engaged Centrefarm Aboriginal Horticulture Limited to manage an area of leasable land within its Aboriginal Freehold lands. Centrefarm has leased the area to AFM Central Australia Pty Ltd, a non-Indigenous family business to develop and operate a 500 ha horticulture operation within the lease area. This operation is currently producing 8,000 tonnes of watermelon per year.
Kuti Co	Kuti Co is jointly owned by the Ngarrindjeri Aboriginal Corporation, which represents the native title rights and interests of the Ngarrindjeri people, and Ngopamuldi Aboriginal Corporation, which is a small business with experience in natural resource-based enterprise. Kuti Co operates a wild catch pipi business in the Coorong and Lower Lakes coastal area of South Australia that is based on fishing licences equivalent to 15.82% of the total South Australian pipi quota. Kuti Co also holds about 22% equity interest in Goolwa Pipi Co, its downstream processing and distribution partner.
Roebuck Plains Station	Roebuck Plains Station is a beef cattle breeding and growing enterprise based on a 275,540 ha pastoral lease. It is located within the Yawuru people's exclusive native title determination area near Broome in the West Kimberley Region of Western Australia and has capacity for approximately 18,000 head. The enterprise and pastoral lease are owned by Nyamba Buru Yawuru Ltd, a subsidiary of Yawuru Native Title Holders Aboriginal Corporation. Nyamba Buru Yawuru also owns the Roebuck Export Depot located adjacent to the Broome Port. It is the subject of a special purpose lease and has a holding capacity of approximately 12,000 head of cattle and is currently leased to the Indigenous Land and Sea Corporation with the intent to revert back to Yawuru as early as possible.

Yallalie Downs	Located on the traditional lands of the Yued people of the Noongar Nation in the Shire of Dandaragan, Yallalie Downs is a 2,242 ha broadacre freehold property and beef cattle backgrounding operation owned and operated by the Beemurra Aboriginal Corporation, a family-owned business with ancestral connections to Yued Country. Beemurra is also a member of Noongar Land Enterprise Group, a First Nations grower group whose members represent a diverse production portfolio including, beef cattle, sheep, honey, bush foods, sandalwood, cultural tourism and training.

The dimensions of modern First Nations agricultural enterprises

Collectively, the case studies illustrate several key common themes.

First Nations primary industry ventures start with capacity building

While at varying stages of maturity, each of the five enterprises comprising the case studies, report a story of capacity building across governance, technical, agribusiness specific and general commercial capability. This can be a decadal process and is ongoing across all the case studies.

The case studies demonstrate nine processes whereby capability is developed and established. These include: leasing part of the core asset to an independent capable operator; allowing locals to leverage from that capability; creating joint venturing with partners who have capacity; appointing experienced directors and managers; and, seeking support and advice from organisations including the ILSC, ORIC, NLE, the Jawun secondment program and states' and territory's departments of primary industries.

Commercial operations–resource utilisation, profitability, diversification and expansion plans

While motivated by additional social, cultural and environmental factors, each of the case studies is a commercial business. Even though financial accounts were not made available to the researchers by all the case studies' organisations, those which presented financial information were characterised by profitability. The nature of the activities of those which did not, suggests that, *prima facie*, they either were financially sustainable or on a pathway to financial sustainability. In all cases some financial benefit is returned to the ultimate beneficiary, the First Nations owner of the natural resource that underpins the production asset.

Each of the organisations comprising the case studies are either operating near or at the optimal sustainable use of its natural resource or is on a trajectory to do so. Furthermore, each of these organisations have plans to expand and diversify.

- Desert Springs Farm is planning to increase its acreage and expand into peanut production and immediate downstream processing, and is exploring expansion

into garlic, pumpkin, potatoes and cabbage production, with plans to trial lettuce, bok choy, pak choy and herbs in a yet to be constructed greenhouse.

- Roebuck Plains Station is looking to establish formal upstream and downstream beef supply chains and is exploring diversification across tourism, hunting and resource collection, minerals exploration, carbon and offsets market opportunities.
- Delta Downs Station is seeking to expand into tourism (eco and cultural tourism) opportunities, retail butchering, market gardens and aquaculture.
- Kuti Co is seeking to increase quota and equity interest in a related downstream processor, as well as diversifying into other local fisheries, tourism and retail.
- Yallalie Downs is seeking to increase the capacity of its operation.

Social dividends are central to the business model

Consistent with the research of agricultural economics, Rola-Rubzen (2011) considers that a significant component of the business model of the five organisations is the delivery of significant social benefits to the local First Nations community. In all cases this includes various work-ready, training, employment pathways and opportunities and variably, financial contributions to local health, education and social initiatives.

Cultural preservation and caring for Country are central to the business model

The five organisations' activities revolve around primary production assets located on traditional lands of the owner or a primary beneficiary. This delivers cultural benefits, facilitating re-connection to Country and immediate access to important cultural assets and practices.

Furthermore, caring for Country is an integral component of the business model for each of the case studies. In the case of Desert Springs Farms, this takes the form of co-mapping of Country to identify important cultural and environmental assets that require management and preservation. Roebuck Plains Station has an overlapping IPA that incorporates part of the pastoral lease area and implements sustainable grazing practices across the property with involvement of the Nyamba Buru Yawuru's Ranger group. Delta Downs Station focuses on weed control and increasing biodiversity across the properties in accordance with the Kurtijar people's Land and Saltwater Country Plan. With the support of the Normanton Ranger Group, Delta Downs Station is exploring implementing an IPA over components of its land holdings. Yallalie Downs

supports youth programmes at its cultural healing place and Aboriginal Astro-tourism experiences.

In the case of Kuti Co, science has proven that pipi have been a traditional food of the Ngarrindjeri people for tens of thousands of years, providing an immediate and direct connection to culture. Additionally, the Ngarrindjerri Rangers oversee the implementation of Ngarrindjeri Nation Yarluwar-Ruwe (Sea Country) Plan (2006) and the Coorong and Murray Lower Lakes Working on Country Programme.

The governance framework is tried and tested

Except for Yallalie Downs, which is a family-owned and operated business, all the organisations represented in the case studies use structures characterised by corporate separation between the ultimate beneficiaries of the primary production resource and the associated primary production enterprise. In the case of Desert Springs Farm, this relationship is largely transactional in nature involving agency, licensing and leasing arrangements. The structure also caters for some First Nations beneficiary oversight. For the other three organisations, holding company-subsidiary corporate structures are used.

Section 46 of the *Corporation Act* (Cth) *2001* provides that a company is a subsidiary of another company, referred to as a holding company, whereby the holding company:

- Controls the composition of that company's board of directors; or
- Controls more than half of that company's maximum voting power at general meetings; or
- Holds more than half of the share capital issued for that company; or
- That company is a subsidiary of a subsidiary of the holding company.

Subsidiary companies are used to separate certain operations of a company into a distinct but related legal entity for a variety of purposes including:

- Protection of core assets by reducing the exposure of a company's core assets from legal action that might arise from the operations of the subsidiary;
- Optimisation of taxation liabilities or concessions;
- Management efficacy, separating the management functions of the parent from those of the subsidiary;
- Raising of capital for specific operations; and
- Preparing specific operations for an exit through a trade sale or listing of securities on an exchange.

Subsidiary structures are also commonplace in the not-for-profit sector, particularly for the management of enterprises that are designed to generate revenue for the not-for-profit holding company or its purpose, or a social enterprise that is designed to deliver benefit for the constituents of the holding company.

Communal decision-making is an aspect of governance in many First Nations cultures and is one that is common in Native Title PBCs. Historically, this has been cited as being a potential hindrance to efficient commercial decision making. However, in three of the five organisations represented in the case studies, subsidiary structures have been used to mitigate this issue.

In the case of the two larger beef breeding and growing enterprises – Roebuck Plains Station and Delta Downs Station – the productive assets and associated enterprise are held in corporations that are, as in the case of Roebuck Plains Station subsidiary to the Yawuru PBC and in the case of Delta Downs Station, subsidiary to an Aboriginal and Torres Strait Islander Corporation that is owned by Traditional Owners. An interesting difference between the Roebuck Plains and Delta Downs structures is that, in the case of Delta Downs, the subsidiary is able to pay dividends to the holding company. This is because the subsidiary holding Roebuck Plains is a company limited by guarantee so it cannot pay dividends to the PBC and instead builds wealth for other investments and initiatives undertaken on behalf of the Yawuru PBC.

In the case of Kuti Co, the pipi quota, fishing licences and associated enterprises are held in an incorporated joint venture, the two shareholders of which are a PBC and another Aboriginal and Torres Strait Islander Corporation.

The corporate structures of Roebuck Plains, Delta Downs and Kuti Co are designed to provide a degree of separation between the broader cultural decision-making environment that is typically associated with First Nations community and Traditional Owner representative organisations. Yet the governance structure associated with the Desert Springs Farm project is designed to provide some integration of Traditional Owners to ensure their oversight and due influence is not negated by the agency, licensing and leasing arrangement that determines its structure. This has necessarily resulted in a, *prima facie*, somewhat complex governance structure.

Significant collaboration between First Nations groups

Another challenge to developing First Nations enterprise more generally that is frequently espoused, is the relatively high levels of fragmentation and competition between what are typically small organisations for limited resources. The cases studies

suggest a very different story as they demonstrate meaningful and regular collaboration between relevant First Nations organisations with the intention of delivering mutually beneficial economic, social, cultural and environmental outcomes.

Desert Springs Farm was given effect through a collaboration between the CLC and Centrefarm. Kuti Co has received support from Jawun and Ngarrindjeri Regional Authority. Yallalie Downs is a member of an all First Nations grower group, NLE.

Indigenous Land and Sea Corporation has been an important resource

With the sole exception of Desert Springs Farm, the ILSC has performed an important and diverse role in establishing and supporting the five enterprises. In the case of Roebuck Plains Station, the ILSC acquired the pastoral lease on Yawuru Country and granted it to a subsidiary of the Yawuru PBC. The ILSC also supported capacity building, by leasing the operations back from Yawuru for a period while NBY built its pastoral operations capability and has provided support for caring for Country initiatives.

In the case of Yallalie Downs, the ILSC acquired freehold broadacre farmland on the ancestral lands of the owner family and granted that property to them. While the three pastoral leases comprising Delta Downs Station were acquired through different means, the ILSC has provided that station with land management grants to improve the properties. In the case of Kuti Co, the ILSC provided financial support to acquire the pipi fishing quota that underpins the business and an equity interest in the downstream processor.

Other government agencies

In addition to help from the ILSC to establish the case study's enterprises, other Commonwealth, state and territory government agencies and instrumentalities have supported the five organisations. The nature of this support has ranged from cash grants through to planning, research and technical advisory services.

From the Commonwealth Government:

- The National Indigenous Australians Agency (including its Empowered Communities and Indigenous Advancement Strategy programmes), helped Kuti Co and Delta Downs Station;
- Kuti Co benefitted from the National Oceans Office;
- Yallalie Downs received support from ORIC; and,
- Desert Springs Farm was a beneficiary of support from the CRCNA, Charles Darwin University and the ABA.

From state and territory governments:

- Desert Springs Farm was supported by the Northern Territory Department of Industry, Tourism and Trade and Northern Territory Department of Primary Industries and Resources;
- Delta Downs Station received help from the Queensland Government Indigenous Ranger Programme;
- Roebuck Plains Station was assisted by Lotterywest; and,
- Roebuck Plains Station and Yallalie Downs benefitted from the Western Australian Department of Primary Industries and Regional Development.

Limited private capital

The challenges First Nations people and entities face with accessing finance is well documented. For example, in 2017 it was estimated that while 17 percent of Australian adults were severely or fully excluded from accessing financial services, a full one-third of the Australian First Nations population was either unable to, or presented with significant challenges with respect to, accessing financial services (Financial Ombudsman Service Australia 2018). Other research has identified that only one in ten First Nations Australians is financially secure (Centre for Social Impact and First Nations Foundation 2019). Factors known to contribute to these circumstances include: lower levels of employment, particularly among higher paid professions and vocations; lower levels of inter-generational wealth transfer among First Nations families; and as a result, relatively limited personal assets can be used to access finance.

With the exception of the Desert Springs Farm which has deployed approximately $6.5 million of private capital spent by a non-First Nations company, there has been little, if any, private capital sourced and deployed by the enterprises. This raises the question as to how investable the assets might be, and which asset classes may be sources of additional capital.

Restrictions associated with the tenure on which the enterprise is based is problematic for the purposes of attracting both equity and debt capital to First Nations land-based ventures. However, for First Nations agricultural ventures that can demonstrate adequate financial performance and measure the social and environmental impact of their business model and operations, there is a potential opportunity to attract more private capital from the emerging social impact investment asset subclass.

The social impact investment (or ‘impact investment’) asset subclass has grown to meet investor demand for the alignment of social and environmental values with

investment, whereby investments targeted by the asset class seek to produce both financial returns and positive and measurable social and environmental outcomes.

Impact investment has four core elements:

- **Intentional** – there is a deliberate and clear intention on the part of the investor to contribute to a social and/or environmental outcome, rather than that outcome simply being a by-product of the investment.
- **Financial return** – impact investment is not philanthropic – it seeks a return on the capital deployed that can range from return of capital through to full competitive financial returns.
- **Investment instrument agnostic** – impact investment can be given effect through the full range of equity, equity-like and debt instruments.
- **Measurable impact** – professional impact investment typically requires the social and/or environmental outcomes of the investment to be objectively measurable and clearly traceable to the investment.

The relatively new impact investment sector has grown rapidly in recent years. Across the full spectrum of responsible and ethical investment there is currently US$35.3 trillion under management, representing over one-third of all professionally managed assets. Of this, 2% is characterised as impact investment, with total impact investment funds under management exceeding US$715 billion globally, representing growth of 40% since 2018 and expected to reach US$1 trillion by the middle of this decade (Social Impact Investment Taskforce 2019). While just under half of impact investment is deployed across Europe and North America, Australia, whilst small in comparison, is a growing impact investment market. In 2020, impact investment in Australia totalled A$29 billion, a 457% increase since 2017. Most of the Australian impact investment is focused on environmental outcomes, mainly in the form of green bonds. However, while impact investments targeting social outcomes represent only 4% of funds, they account for 60% of the number of investments and have increased 10-fold since 2017 (Responsible Investment Association Australia 2018, 2021).

Being able to identify high potential agricultural land and measure and account for social and environment impact will be key to attracting impact investment to the First Nations agriculture sector.

First Nations primary industry faces the same challenges as most regional businesses

Not surprisingly, the case studies indicate that First Nations primary production businesses face the same challenges that other regional businesses face, particularly with respect to access to infrastructure. Many parts of regional, and particularly remote Australia are characterised by very limited transport and energy infrastructure. Four of the five case studies' organisations (Roebuck Plains Station, Yalallie Downs, Kuti Co and Desert Springs Farm) are in close proximity to major regional highways and three (Roebuck Plains Station, Yalallie Downs and Kuti Co) are located in reasonable proximity to major regional towns or cities.

CONCLUSIONS

The analysis of the five case studies identifies that First Nations primary production industries are diverse, increasingly financially sustainable and delivering significant cultural, environmental and social benefits to local First Nations communities and the broader national economy. First Nations people are willing and successful participants in primary industries.

The preconditions to First Nations participation include mechanisms that enable technical, commercial and governance capabilities, including through external agencies and through existing cultural governance arrangements. Governance frameworks based on holding-subsidiary company models that provide appropriate cultural and community oversight, whilst separating operational management of the primary production enterprise, are commonplace among First Nations primary industries businesses and appear to be a tried-and-tested model.

Access to capital and other services and data are equally important enablers. The reliability of leases, and other tenure, limits land holders' access to capital. Commonwealth, state and territory agencies and instrumentalities provide financial, research and advisory services to First Nations primary production businesses. Of note, the ILSC has been an important resource for First Nations primary production enterprises to build capabilities, divest land and grant funding. Also crucial are the networks and genuine, meaningful collaboration among First Nations organisations. These support culturally appropriate frameworks for sustainable development, enable partnerships and access to supply chains and markets, provide advocacy and specialist expertise, support innovations, and generate data.

When afforded capacity and capabilities, First Nations primary production industries optimise the sustainable use of natural resources together with maintaining cultural and biodiversity assets. Business models are founded on preserving culture and caring for Country and creating social dividends for local First Nations communities. Development interests go beyond mainstream primary industries and build on natural and cultural capital. Interests encompass emerging and innovative land and water-based enterprises, such as native bushfoods production, botanical pharmaceuticals, carbon farming and agritourism, some of which already contribute to national gross domestic product.

The benefits from First Nations participation in primary industry surpass monetary returns. Agricultural development is supported by social, environmental and cultural capital and sustainable practices that underpin First Nations people's connection to Country. The benefits are what the Yawuru nation feel as *mabu liyan*, the prosperity, health and wellbeing of their community expressed through their self-determination and autonomy to develop and use their estate.

The five First Nations organisations which participated in the research were found to have been executing diversification and expansion plans. Of the five case studies, there appears to have been very little private capital invested in First Nations primary production businesses. Industry willingness to partner with Kuti Co is exceptional, and the success of this partnership highlights the important opportunity to attract greater social impact investment in the primary industry sectors.

The case studies' research that informs the principal situational analysis on the agricultural capacity of the Indigenous estate (Barnett et al. 2022), show potential in parts, and demonstrate opportunities for further First Nations participation in primary industries.

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Appendices

Appendix 1 Excluded Case Studies

These case studies which met selection criteria were excluded because their interest in the Project and access to data was not confirmed:

1. **Northern Australia Aboriginal Kakadu Plum Alliance – Kimberley, Western Australia to Top End, Northern Territory – Plan Cultivation**

The Northern Australia Aboriginal Kakadu Plum Alliance (NAAKPA) supports Aboriginal-owned enterprises supplying fruit and extract to the Australian market. NAAKPA acts to provide stability and reliability to the Kakadu plum supply chain by providing an accessible and centralised point for buyers of Kakadu plum. Importantly, NAAKPA also provides seasonal employment (over 400, mostly women), builds capability, promotes networking and knowledge sharing, builds a stronger connection to Country, and generates economic benefits stemming from traditional cultural practices. NAAKPA has become Australia's largest Indigenous-controlled native-food supply network for Kakadu plum and for other native plant food species being distributed to national markets.

ILSC provided start-up capital to NAAKPA in 2018–19 and further capital in 2019-21 with the view it would be incorporated by 2022. The ILSC project to start up NAAKPA has increased the operational capacity and capabilities of each of the Aboriginal enterprises by providing food safety audits; chemical and microbial testing of fruit; the development of marketing material; and the creation of marketing opportunities, including representation at the Asia Pacific Food Safety Conference. Contract templates for Access and Benefit Sharing Agreements to protect traditional knowledge have also been created for buyers of the product.

ILSC funding has also been used to buy equipment, including stainless steel benches, freezers, packing machines and all-terrain vehicles, and to support travel to facilitate training, networking and knowledge sharing among the Aboriginal member enterprises.

2. **Woorabinda Pastoral Company – Rockhampton, QLD – Animal (cattle) Cultivation**

Woorabinda, located 170 km south-west of Rockhampton in central Queensland is the traditional lands of the Wadja Wadja and Gangulu nations and home to about 52 clans. Both nations have native title claims. The Woorabinda Aboriginal Shire Council is the sole shareholder of the Woorabinda Pastoral Company Pty Ltd which owns Foleyvale Station near Duaringa. The Foleyvale station is 16,187 hectares (ha). The majority is used to ranch 6000 head of cattle and 3700ha is set aside to cultivate crops such as wheat, corn, chickpea, sorghum and mung beans.

Indicators of success: market value of cattle as at 2018 was over $4 million; $160,000 grain; over $1 million crops, plus nearly $150,000 of other animal stock. The enterprise supports local long-term employment and training. Issues include high risk to crops and access roads to

markets due to the prevalence of flooding, and high unemployment of 70% of the Woorabinda population. The community is heavily reliant upon government welfare and grant funding.

3. Tiwi Plantations Corporation, Melville Island, NT – Tree farming

Tiwi people have been using their forest for culture and ceremony for thousands of years. The NT Government established the first cypress pine plantation in 1960, and in 1986 handed over the 4900ha plantation to the Tiwi Land Council. The Tiwi Plantation Corporation Trust for which the Tiwi Plantations Corporation Pty Ltd is Trustee, was established in 2009 to provide social benefits from the plantation to the community. In 2014, it secured a sales and purchase agreement with Japanese company Mitsui to ship woodchips and wood for paper manufacturing. The activity provides local jobs to Tiwi people.

These case studies were excluded because they did not meet the selection criteria:

4. Black Duck Foods, Mallacoota, Victoria - Plant (native grasses) Cultivation

Since 2019, Black Duck Foods has supported Indigenous communities re-engaging and empowering themselves with the utility of pre-colonial food systems, such as harvesting native grains and land stewardship practices, and to support Indigenous Australians leveraging their own traditional culture and knowledge for economic benefit and environmental stewardship.

This investment was excluded because the activity isn't operating on the Indigenous estate and is in early stages of production.

5. IndigiGrow Nursery, Eastern Suburbs of Sydney, NSW - Plant (native) Cultivation

IndigiGrow is a 100% Aboriginal owned not-for-profit social enterprise that employs seven First Nations apprentices. It operates a native plant and bushfood nursery in the eastern suburbs of Sydney. It was formed by the First Hand Solutions Aboriginal Corporation. It delivers positive cultural & environmental projects by growing and reviving local endangered native plants and native edibles. It is principled on passing down traditional knowledge to young First Nations staff. IndigiGrow also introduces and educates the wider community about the wide-ranging benefits of native plants.

This investment was excluded because the activity is operating in a conservation area managed by the NSW Government, not on the Indigenous estate.

6. Arnhem Land Fire Abatement (NT) Ltd (ALFA), NT - Carbon Farming

ALFA has been operating since 1990. It is 100% Aboriginal-owned. It is a not-for-profit carbon farming business. ALFA acts to support Traditional Owners manage five fire projects across an area more than 80,000 square kilometres that encompasses vast savanna regions, rugged sandstone escarpments, monsoon rainforest, intact river ecosystems, floodplains, and remote coastal areas.

This interest was excluded because the activity is not considered a primary industry as defined by the Australian Taxation Office.

7. ILSC, North Bruny, Tasmania – Animal (sheep) Cultivation

Since 2006, the ILSC has managed a small sheep farm on Bruny Island. The property is owned by the Weetapoona Aboriginal Corporation. Currently, the ILSC is working with Weetapoona Aboriginal Corporation on options to transfer primary operations from the ILSC.

This investment was excluded because the activity is being led by a government agency – a subsidiary of the ILSC.

8. Yorta Yorta Aboriginal Corporation, Victoria - Plant Cultivation

The Yorta Yorta Aboriginal Corporation is in the process of setting up wattle seed harvesting and honey production on land they own with support the of the ILSC.

This investment was excluded because the activity is a new establishment.

9. Nari Nari Tribal Council, Hay, NSW – Animal (cattle and sheep) Cultivation

The Nari Nari Tribal Council is a not-for-profit agency interested primarily in the protection of Indigenous culture and history and the environment. Since 2000, they have been managing a small flock of sheep and herd of cattle on their own irrigated farmland, which has generated employment. Management is underpinned by conservation values and includes projects, the Toogimbie IPA and Gayini Conservation Area.

This investment was excluded because the activity is small scale and focused more on environmental protection than agricultural development.

Appendix 2 Case Study Guide

Activating the Indigenous Estate - Baseline Study of Agricultural Capacity – Case Studies Guide

1. Introduction

Five case studies of regional agricultural investments on the Indigenous estate owned by Indigenous land holding groups are being examined (three in the north and two in the south of Australia) to provide a narrative for an enhanced and widespread understanding of success factors:

1. Centrefarm / TopEndfarm – Northern Territory – plant cultivation
2. Northern Australia Aboriginal Kakadu Plum Alliance (NAAKPA) – Top end WA and NT - plant cultivation
3. Noongar Land Enterprise Group – South West WA – mixed animal and plant cultivation
4. Kuti Company (Kuti Co) – Goolwa, SA – fishing
5. Morr Morr Pastoral Co – South East Gulf of Carpentaria, Qld – operator of Delta Downs cattle station.

2. Success Indicators

List of success indicators being examined:

- Land tenure
- Arability
- Water access, availability, quality and infrastructure
- Governance frameworks – First Nation engagement strategy
- First Nations perceived values of the project
- Development model (i.e. strategic or business plan, community engagement/development strategies, land use agreements)
- Data access and research capability
- Partnerships and access to capital (i.e., government, industry, investors)
- Project has a relationship with mainstream producers
- Market accessibility
- Industry infrastructure
- Personnel/management/skills
- Profitability – capital return on investment
- Cultural (including health and wellbeing) return of investment - benefits
- Environmental impact

3. Types of information being sought

Information being sought:

- Use of information
  - What information is currently used for management and planning? strategic and operational plans, land or sea management plans, land use agreements, community engagement strategies,
    - Public sector information (e.g. from ABARES, ABS, State agencies)
    - Private sector information
  - What information would you like to have?
- Financial information
  - Are there publicly available annual reports that include financial information
  - Is there other publicly available financial information, revenue and assets, including infrastructure
  - A contact name for enquiries on financial information
- Spatial area of operation, including maps
  - total area of operation in the landscape (or seascape)
  - area used for production of goods and services
- Business operations, including images and logos
  - Enterprise operations details of which may not be covered in public Annual Reports and financial statements.
    - What are the main income streams from sales of goods and services (e.g. agricultural products, tourism/other associated services)
    - Is there any information on the purchasers of the goods and services (i.e. who do you sell to)
    - Do they receive Commonwealth or State/Territory government grants or other payments for land use and management (e.g. of IPAs)
    - What are the main inputs to production of goods and services for sale (e.g. current (water, fertilizer, fencing, fuel, road maintenance) and capital costs (trucks, pumps, generators, machinery, sheds, etc)
    - Supply chains, market accessibility
    - A contact name for business operations
- Any evaluation studies to measure outcomes or growth, community benefits.
- Research engagement
  - Have you been involved in other studies or engaged research for your purposes
  - Any reports to share regarding those studies
  - Any expectations for this research
  - What benefit is this research for you?

4. Case Study Template (to be filled in by ANU)

Case Study Name [owner and operating entity] [Subsector of Agriculture]

[logo; images; location maps; permissions] 4- 8 page spread.

Overview of Regional Agricultural Investment

Region:
Description of region where it is operating, market region, location on Indigenous estate, including maps.

Land Holding and Operating Entity:
Description of enterprise

Land Tenure:
Any land use agreements/leasing arrangement or other framework used to engage First Nation landholders

Time in operation

Employment (number of staff)

Development Model

Strategic plan/operational plan/land management plan, other documents that identify First Nations principles and goals for subsector development.

Governance Model

Key parties engaged in the project
What is the framework to bring them together i.e., Native Title Prescribed Body and subsidiaries, Aboriginal not for profit company, other
Management structure

Operating environment

Portion of land holdings used for agricultural development, including maps of area:
Portion of arable land: baseline
Water availability and quality: baseline
Water access entitlements (if applicable):
Annual Production and trend over time:
Annual Revenue and trend over time:
Personnel/training and trend over time: Market background:
Means to access market:
Infrastructure and value of assets and any trend over time:
Partnerships with mainstream producers including any financial arrangement:
Partnerships with government agencies including funding arrangement:

Access to private capital:
Philanthropic support:
Research undertaken/data access both internal and external:

Benefits/Impact on the community

Any monitoring and evaluation frameworks to identify and measure benefits
Highlighting evidence of project providing direct benefit to Traditional Owners and in what capacity (economic and social return, customary practices and cultural wellbeing, environmental provisions) and strengths based Indigenous led entrepreneurship and governance.

Challenges

Relevant to all of the above, highlight evidence of key challenges or sticking points.

Future

Plans/Aspirations for the next 5 years

5. How your information will be used

- The final published research report - Baseline Study of Agricultural Capacity research report will include a chapter on the case studies.
- The chapter will have a section introducing the case studies, their purpose and methodology used.
- There will be write ups for each case study for which we will seek your approval to publish the information specific to your case study.
- This will be followed by an overarching analysis of all 5 case studies for the chapter that draws conclusion on success indicators and provide any recommendations.
- A final draft of the chapter will be shown to the owner of the regional agricultural investment for comment.
- As well as being included in the final report, the case study chapter will be published as a separate report.
- The case study, the case studies report and the final published research report will be made publicly available and distributed widely to Government agencies, industry, First Nation groups and some of these groups may choose to upload them onto associated websites and circulate them to their members.

6. Information sharing agreement:

In the interest of transparency and parity among case studies and to protect each other's interests, ANU proposes using one agreement for all six parties (ANU and the 5 case study groups).

The agreement is a short and simple form called a 'Data Sharing Agreement' that sets out intellectual property and publication clauses that will conform with ANU's head agreement with the CRC for Developing Northern Australia.

Of note:

- The owner of the agricultural investment owns data used for the case study, for which it provides a license to ANU to use for its purposes, including a sublicence to CRCNA to publish.
- ANU owns the IP for the case study report that provides the analysis across all 5 case studies to draw conclusions on success indicators and gives a license to the owner of the agricultural investment and CRCNA to use for publication purposes.

7. Key Steps

1. Initial meeting.
2. Sign off on data sharing agreement.
3. Data collection.
4. 1-2 hour workshop with key people to ground truth data and check any missing information.
5. Review of draft case study chapter prior to publication.