The ability of community based natural resource management to contribute to development as freedom and the role of access

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ABSTRACT

Ribot's access constraints mediate the generation of development benefits from community based natural resource management and co-management systems and programs. Context-specific access constraints also interact with diverse understandings of what constitutes development to create benefits that are non-linear through time, multi or uni-level, prone to hysteresis, socially mediated, vary through space and experienced quite differently by different social actors. In hybridized State-community governance arrangements, this complexity results in ongoing tensions and entanglements as different social actors seek to leverage available opportunities to overcome or circumvent short or longer-term access constraints in pursuit of their understanding of development. In turn, this complexity makes it difficult to understand the full suite of potential development benefits generated by community based natural resource management or co-management structures. Here, we explore potentially competing conceptualisations of development, and the contribution of community based natural resource management to these understandings of development. Using Australia's Indigenous Land and Sea Management Programs to inform this exploration, we show that development is primarily conceptualised as 'control, leadership, empowerment and independence,' in line with Sen's development as freedom, by the Indigenous groups involved in these programs. State actors understand development in ways that more closely align with Sen's functionings, or a capability list – for example, the relative uptake of jobs and training. Despite this potential mismatch, some Indigenous groups have been able to leverage opportunities available to them, including those provided by the programs, to overcome access constraints to their understandings of 'freedom'. We conclude by offering suggestions as to how community based natural resource management programs could be improved.

1. Introduction

Community based natural resource management (CBNRM) and co-management have been embraced as governance mechanisms attending to environmental management whilst allowing local communities higher levels of control over natural resource use. CBNRM is underpinned by common property resource theory, which posits that well-defined and respected local control over natural resource use is more likely to lead to strong social norms

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and rules over resource use (Ostrom, 1990). In practice, CBNRM generally involves a hybridized, multi-level governance structure with higher level (often State/Government) actors providing funding and varying levels of guidance to lower level actors, who then construct activities and rules over resource management (Lockwood & Davidson, 2010). In Australia, Aboriginal and Torres Strait Islander land and sea management programs (hereafter Indigenous land and sea management programs – ILSMPs) are an expanding and increasingly important form of CBNRM that seek to achieve the dual goals of environmental management and Indigenous development. Despite reports of their positive social benefits in Australia (e.g. Lane & Corbett, 2005; Gilligan, 2006 in Ross et al., 2009; Kimberley Language Resource Centre, Kimberley Aboriginal Law and Culture Centre, & Kimberley Land Council and Kimberley Aboriginal Pastoralists Incorporated, 2010; Davies et al., 2011; Gorman & Vemuri, 2012; Green & Martin, 2017; Larson et al., 2018; Jarvis, Stoeckl, Addison et al., 2018, Jarvis, Stoeckl, Hill, & Pert, 2018), other research suggests CBNRM and community protected areas often accrue mixed benefits e.g., (Brooks, Waylen, & Mulder, 2013, 2012; Dressler et al., 2010; Kothari, Camill, & Brown, 2013; Nilsson, Baxter, Butler, & McAlpine, 2016; Porter-Bolland et al., 2012; Riehl, Zerriffi, & Naidoo, 2015; Silva & Masimone, 2013), or can be problematic (e.g. Brosius, Tsing, & Zerner, 1998; Kellert et al., 2000; Agrawal & Gibson, 2001; Cooke & Kothari, 2001; Waylen et al., 2010, 2013; Stone & Nyaupane, 2014).

One issue is that a local group's right to manage natural resources in the way that they see fit can be constrained by a dependence upon external social actors or resources to exercise this right. Common property resource literature suggests communities can adequately manage natural resources with complete control but the reality of hybridized CBNRM governance is often incomplete property rights (Bollig and Schweiger, 2014): the implementation of decentralized land management is rarely realized because democratic decentralization is rarely established in the first place (Ribot, Lund, & Treue, 2010). In the case of CBNRM, rights to local control do not always translate into access to the resources needed to exercise these rights, making power and resource-sharing necessary. The theory of access (Ribot and Peluso, 2003) postulates that access is the ability to benefit from things, including institutions and natural resources. A broader focus on ability rather than institutional rights per se as in property theory brings attention to a wider range of social relationships that can constrain or enable communities to benefit from resources without focusing on property relations alone. Thus, access mechanisms that can shape the ability of communities to benefit from natural resources include structural and relational mechanisms such as knowledge, markets, capital, technology, labour, authority, social relations and social identity in addition to rights-based access (Ribot and Peluso, 2003).

A second issue around the contribution of CBNRM to community development is the lack of shared understanding of what constitutes a 'benefit'. In turn, this is underscored by the diversity of ways in which 'development' is understood. The development of Indigenous Australians is an oft-stated goal of the Australian federal government (hereafter referred to as 'the State') but approaches and understandings of what constitutes development has been largely divorced from broader international thinking (Bulloch & Fogarty, 2016).

There is a large and diverse literature which considers 'development' from multiple disciplinary and theoretical perspectives. To give just a microcosm view of this diversity, see for example, Schumpeter (2017) on the *Theory of Economic Development*; Wasylenko (1999) for a discussion on taxation, public administra-

tion and development; Young, Peng, Ahlstrom, Bruton, and Jiang (2008) on corporate governance and emerging economies; Mitchelmore and Rowley (2010) on entrepreneurship and development; Pezzoli (1997) and more recently Murphy (2012) on sustainable development. Within this subset of the international literature, Sen (1999) thesis on 'development as freedom' has been particularly influential.

Sen (1999) defines freedom as opportunities, and the empowerment and agency that members of society experience. Sen (1999) understands the development of freedom through systemic process freedoms, such as those related to political liberties and public deliberation that allow for social change. Rather than focusing on the attainment of pre-defined outcomes (e.g. subjective assessments of individual/personal wellbeing) or access to resources (e.g. income), Sen's freedom focusses on functionings and capabilities that indicate a person's opportunity and ability to generate outcomes that are seen as valuable. Functionings incorporate intrinsic values related to the states and activities that make up a person's being ('beings and doings' to which a person has real access), like being nourished, having a good job and being safe; whilst capabilities are the real freedoms or opportunities to achieve functionings. Opportunity freedoms and agency relate to the freedom to pursue different functioning combinations (or capability sets). As such, the approach combines a focus on outcomes with a focus on processes (Alkire & Deneulin, 2009). The approach thus departs from subjective well-being research by offering a broader space to assess an individual's situation, including a focus on agency and opportunities (Binder, 2014). However, in regards to the application of freedom to policy development for Indigenous Australia, Klein (2016) argues that the interpretation of the capability approach has missed the core concepts of freedom, agency and pluralism. As Bulloch and Fogarty (2016) ask: do Indigenous Australians hold aspirations that are based on other ways of imagining the good life and, if freedom is important to their goals, in what form is it expressed?

These two issues intersect with CBNRM in two key ways. Firstly, the theory of access suggests the involvement of the State in the local management of natural resources in a CBNRM context may facilitate or constrain structural and relational access to benefits, even in the presence of rights-based access mechanisms. Secondly, both the State and communities will seek to overcome issues of access in pursuit of their understanding of what constitutes development. Access and capabilities are thus closely aligned. Ongoing tensions and complex entanglements can be created in hybridized CBNRM governance structures where both State actors and communities might have different understandings of development, and where both exercise available agency in leveraging or circumventing access opportunities and constraints to achieve their own understanding (e.g. Lockwood & Davidson, 2010; Singleton, 2000). The 'value' or benefits arising from CBNRM programs, like ILSMPs, may thus be understood or realized in ways that are non-linear through time, multi or uni-level, prone to hysteresis, socially mediated, vary through space and experienced quite differently by different social actors (Binder, 2014; Deneulin & McGregor, 2010).

Here, we seek to explore the relationship between access and understandings of development within the context of hybridised CBNRM governance. Using Australian ILSMPs in five communities as case studies, we use group deliberation to examine the potential alignment between i) the goals and aspirations of local Australian Indigenous people at the community level, and that of the State administering and investing in ILSMPs, and ii) the perceived contribution of ILSMPs to development as it is understood by each actor. In doing so, we highlight ways in which different social actors use CBNRM to capitalise upon or overcome access con-

straints and opportunities to accrue their own understanding of development benefits.

2. Approach

Recognizing that concepts of both individual and community well-being are socially and psychologically co-constituted in specific social and cultural contexts (Deneulin & McGregor, 2010), and given the community level focus of CBNRM, we sought to understand i) what constitutes and what constrains developmental freedom at the community level, and ii) the respective role of CBNRM. Following from the specific criticisms of Bulloch and Fogarty (2016) and Klein (2016) in relation to Indigenous Australian applications, and those of others internationally (as summarized by Binder, 2014), we did not seek to develop a list of functionings or a capability set per se. Rather, drawing upon Sen and colleagues' framing of development, we sought to better understand the ways in which Bulloch and Fogarty (2016) 'the good life' are imagined at the community level by groups of Indigenous Australians, and the ways in which CBNRM may interact with access constraints to realise this 'good life'.

Determining the best way to aggregate one-off data collected at an individual level in order to understand the complex generation of benefits from CBNRM at the community level can be difficult. The core problem is that one cannot assume that all relevant functionings or capabilities contribute separably to an individual's notion of wellbeing/utility (Carbone & Smith, 2013) or to development (from an individual or community perspective). Economists have proposed a range of social welfare functions that (simplistically) seek to use information, collected at the individual level to draw inferences at the community/social scale. This includes adding (Bergson, 1938; Samuelson, 1947), multiplying (after John Nash), looking after the least fortunate person (after John Rawls, 1971), and/or otherwise allowing for inequality (Mukhopadhaya, 2002; Sen, 1974). Group deliberation is a workable alternative to assessing community outcomes, particularly as it allows the group to derive and express their own views about what constitutes 'development', and what factors contribute, in what way, towards that goal. Group deliberation also delivers other benefits including a potential to be transformational, make shared transcendental values explicit, encourage candour and overcome potential constraints due to intimidation generated by one-on-one interactions, and convenience when compared to other social research methods such as participant observation (Barbour, 2007; Chiu, 2003; Lo & Spash, 2012; Morgon, 1997). We thus took a qualitative case study approach using group deliberation, undertaken as part of formal Research Agreements with each group.

We held workshops with five ILSMP-active groups (see Table 1 – summary of case study areas and Fig. 1 – map of involved groups). Participating groups self-selected, as follows. Key research questions pertaining to ways of identifying potential social and economic benefits of ILSMPs were initially drafted in collaboration with the funding organisation. These ideas were discussed at forums across northern Australia, in which Indigenous organisations (Prescribed Body Corporates) participated. Several organisation indicated that they wished to work collaboratively with the research team to co-develop a research project that could help identify those benefits. The workshops described here were one of several activities undertaken as part of the project. We also initially invited two key Federal government departments (representative of the 'State') to be involved in parallel workshops to those in the case study communities, but they were unable to participate. The first case study workshop was thus intended to elicit understandings of development and the potential contribution of ILSMPs to this understanding within the case study communities, with the second aimed at data clarification and seeking permission to share each group's data.

To respect internal cultural governance structures, each group nominated attendees at the workshops (Table 2 provides more information on participants). No attempt was made to facilitate equal participation between participants; all questions were put to the group as a whole to allow those most appropriate, according to internal governance structures, to respond. It is important to note that workshop participation was mediated through the Prescribed Body Corporates, groups that were established to manage Native Title (see next section and Table 1); these groups were assumed to be legitimate community representatives, but their organizational focus on land rights may have created potential bias in the data.

Questions were as open-ended as possible to allow for free discussion where relevant. Workshops with two groups involved translators to help assist. Three of the groups gave permission for the workshop to be tape-recorded, the transcripts of which were then added to the dataset. Workshops took between one and three hours. With each group, we undertook vision mapping, historical driver mapping, and a document analysis (see below for more details). In addition, we also analysed publicly available documents produced by the State funding the ILSMPs, or their consultants, in which the five groups were engaged. Triangulation between each method sought to help guard against results that were an artifact of a single method, source or single investigator bias. Specific methods are as follows.

2.1. Vision mapping

We sought to understand what constituted development for each case study group, so that we could better map how these goals interacted with ILSMPs. We did not seek to follow a specific capability approach, including mapping of capabilities. Rather, without prompting to ILSMPs or pre-defining scope, the lead author asked each group to reflect on their vision for their communities. Visions were listed in bullet point form in front of the group to initiate discussion, with some groups choosing to continue adding visions throughout the rest of the workshop.

2.2. Historical driver mapping

We took the lead of Brosius et al. (1998) in recognizing that there is value in learning more about the specific historical context in which CBNRM has been planned and implemented. We thus sought to elicit the context in which ILSMPs developed such that we could better understand the process that led to community involvement in ILSMPs, and potential community level benefits that subsequently emerged. During the first workshops, we stated that we wished to understand the history of the group and their movement towards achieving their vision(s) by better understanding their history. We asked each group to nominate a year that they felt was important to their community, and then note subsequent key years and events that the groups felt helped moved them towards their vision(s). Neither "important" nor "key years and events" were pre-defined for the groups.

2.3. Prompted contribution of ILSMPs

We finished the first workshops through specifically asking each group how ILSMPs fitted into either the historical map, or their previously identified visions. If the role of ILSMPs had already been highlighted unprompted (U) in the historical driver mapping exercise, we asked for further input or sought to summarise the role with the group to prompt further clarification. If it had not, we prompted (P) by asking the groups specifically to nominate

Table 1
Summary of case study group contexts. ILSMPs = Indigenous Land and Sea Management Programs. NRM = natural resource management. IPA = Indigenous Protected Area (a co-managed protected area).

	Qld	WA			
	Ewamian	Bidan	Bunuba	Gooniyandi	Yanunijarra
Community	- Ewamian language group	- Nyikina Mangala language group, Bidanburra community	- Bunuba language group	- Gooniyandi language group	- Ngurrara language group
Geography	- North Queensland, mainly within the Einasleigh Uplands region - Traditional estate is not easily accessed - Significant populations in north Queensland, Brisbane and Cherbourg - Few live on traditional country	- Lower Fitzroy Valley, Western Australia - Traditional estate is easily accessed - Significant populations in Derby, Broome, Looma and other small communities/outstations - Some live on traditional country	- Middle Fitzroy Valley, Western Australia - Traditional estate is easily accessed - Significant populations in Fitzroy Crossing and surrounding communities and outstations - Many live on traditional country	- Middle Fitzroy Valley, Western Australia - Traditional estate is easily accessed - Significant populations in Fitzroy Crossing, and communities and outstations like Mimbi - Some live on traditional country	- Great Sandy Desert, Western Australia - Traditional estate is remote and difficult to access - Significant populations in Fitzroy Crossing, surrounding communities and outstations, and south of Broome
History	- Dispossessed late 19th century - Stockmen and domestic workers until equal pay provisions in the 20th century, or forcibly removed to Palm Island and Cherbourg	- Dispossessed late 19th/early 20th century - Stockmen and domestic workers until equal pay provisions in the 20th century	- Dispossessed late 19th/early 20th century - Stockmen and domestic workers until equal pay provisions in the 20th century	- Dispossessed late 19th/early 20th century - Stockmen and domestic workers until equal pay provisions in the 20th century	- From the Great Sandy Desert. Moved or were moved into missions and cattle stations in the early to middle 20th century - Stockmen and domestic workers until equal pay provisions
Institutional context	- The Ewamian Aboriginal Corporation was registered in 1994 to support an application for Native Title and to obtain, hold and manage land - In 2013, Native Title determined for >29,000 square km - In 2012, the Indigenous Land Council acquired Talaroo Station (31,500 ha with much pastoral land, and significant cultural and strategic values) - EAC signed a lease with the Indigenous Land Corporation to manage Talaroo Station as an IPA - In 2014, Talaroo Station was officially declared as a Nature Refuge - In 2017 Taleroo was handed back to Ewamian and formally dedicated as an IPA	- The community began when a small pocket of freehold land was granted on the main road between Derby and Broome in 1982	- The Bunuba Aboriginal Corporation was formed in 1991 - The Bunuba Dawamgarri Aboriginal Corporation RNTBC was established in 2012 to hold and administer Native Title (6258 square km) - The claim included the Leopold and Fairfield pastoral leases, portions of other pastoral leases and small reserve land and unallocated Crown Land - A second Native title claim - Bunuba#2 - was registered with the National Native Title Tribunal in May 2012, covering Windjana Gorge National Park and Tunnel Creek	- Granted Native Title in June 2013 and then again in 2016 - The area equates to 11,200 square km and includes several Indigenous-owned Bohemia Downs, Mt Pierre and Louisa Downs stations, and portions of the non-Indigenous Christmas Creek, Gogo, Fossil Downs, Larrawa and Margaret River cattle stations - Approximately half of claim is exclusive possession - The Gooniyandi Aboriginal Corporation RNTBC administers Native Title rights and interests	- The largest of the Ngurrara Native Title claim was determined in November 2007 - Covers 77,814 square km - The Yi-Martuwarra Ngurrara native title claim was registered in 2012 covering 22,130 square km of country - Smaller parcels of land additionally determined - The Ngurrara Indigenous Protected Area, the Warlu Jilajaa Jumu, was declared in 2007 - Most of the Ngurrara Native Title Claim is classified as exclusive possession over unallocated crown land - The Yanunjarra Aboriginal Corporation RNTBC manages the Native Title rights and interests

Table 1 (continued)

|	Qld	WA			
	Ewamian	Bidan	Bunuba	Gooniyandi	Yanunijarra
ILSMP context	- Rangers funded through the Qld Indigenous Land and Sea Ranger Program - Funding also provided by NRM groups such as the Northern Gulf Regional Management Group and the Southern Gulf NRM – concentrating on endangered species (black-throated finch), fire management, and landscape/riparian rehabilitation activities - Natural and cultural heritage management currently focusses on the Talaroo IPA	- WBC has managed a ranger group since 2013 - Ranger group based at Bidanburra community between 2015 and 2016 during which time some Bidanburra community members worked as rangers - Activities centre around water and biodiversity monitoring, endangered species management, weed/pest control, landscape resilience, and fire management - Cultural site management and traditional knowledge transfer also a priority with some tourism	- Entered into Joint Management negotiations with the Western Australian Department of Parks and Wildlife (DPAW) in 2016 - Tunnel Creek, Geikie and Windjana Gorge Parks have extinguished Bunuba Native Title in a sea of exclusive Bunuba Native Title on the surrounding pastoral leases to which Bunuba also have legal rights - The DPAW have casually funded the Bunuba rangers in a fee-for-service arrangement to carry out work on the conservation areas - Bunuba rangers, based out of Fitzroy Crossing, established in 2011 - The Nature Conservancy also supports rangers through fee-for-service arrangements and support in Healthy country planning - Funding also provided by various State-run programs - Activities include biodiversity monitoring, endangered species management, weed/pest control, landscape resilience, and fire management	- The Bayulu rangers were created in 2011 with a female ranger group established in 2014 - Fee for service work for DPAW, fire management, weed control, fauna research, landscape rehabilitation, water monitoring and biodiversity management	- Male and female ranger groups and associated ranger coordinators and a country manager - Work on Ngurrara country, including on the Warlu Jilajaa Jumu IPA from 2008 - Operate according to the Healthy Country Plan Ngurrawarnti Wulya Martamupurru 2012–2022 - Fire management, feral camel and pig management, and maintenance of cultural sites - Fee-for-service work in rehabilitation, tourism, plant and animal surveys, feral animal control and contracting
Examples of ILSMPs	- Working on Country, IPA, Landcare, QLD Land and Sea Indigenous Ranger Program, State NRM	- Working on Country, IPA, Landcare, Healthy Country Planning, State NRM	- Landcare, Healthy Country Planning, Ranger program, Remote regions nature conservation program, Kimberley science and conservation strategy, The landscape conservation initiative	- Working on Country, Landcare, Healthy Country Planning, State NRM	- Working on Country, IPA, Green Army, Ranger program, Healthy Country Planning, Social Investment, Ten Deserts
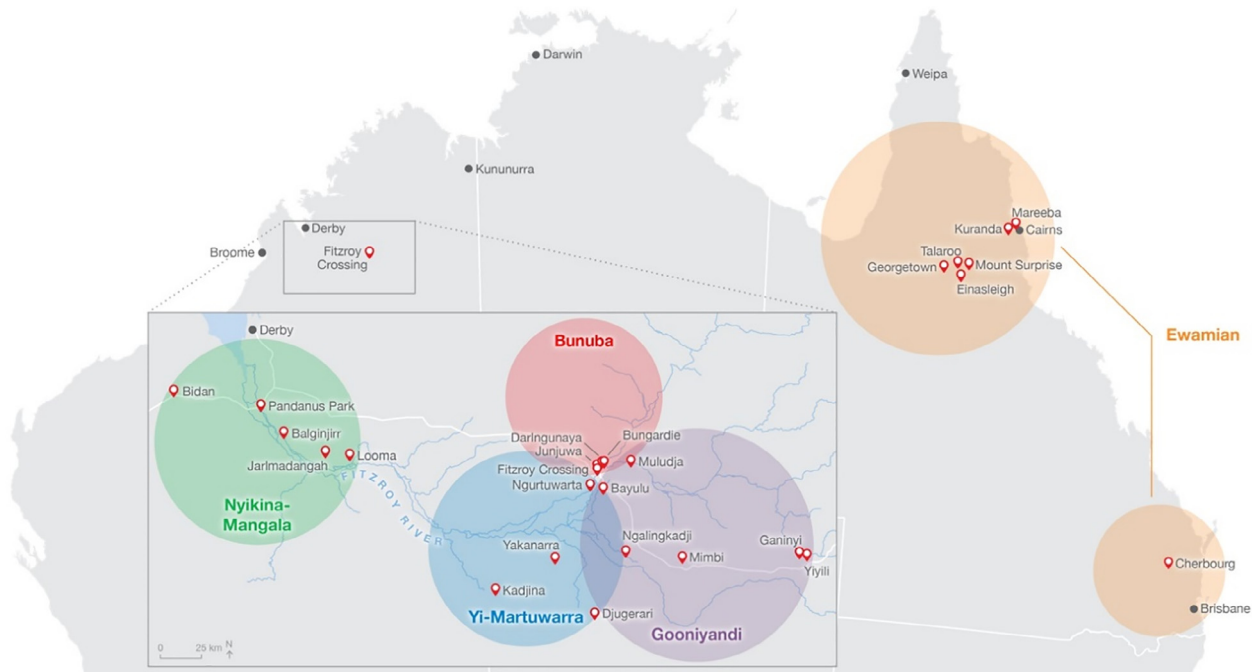
Fig. 1. Location of case study communities across northern Australia.

Table 2
Summary of workshops and their participants.

	Queensland	Western Australia			
	Ewamian	Bidan	Gooniyandi	Bunuba	Yanunijarra
Location and date of initial workshop	Mareeba November 2017	Bidan community April 2018	Fitzroy Crossing April 2018	Fitzroy Crossing April 2018	Fitzroy Crossing April 2018
Number of participants	7	3	11	6	16
Number of males	4	1	7	3	10
Approximate age range	30–60 years	30–60 years	20–80 years	20–80 years	20–80 years
Interpreter?	No	No	Yes	No	Yes

whether and how ILSMPs had contributed to either their vision of the key events previously nominated.

2.4. Document analysis

Document analysis is a method for reviewing or evaluating documents that requires data to be examined and interpreted to elicit meaning, gain understanding and develop empirical knowledge (Bowen, 2009). The method iteratively combines elements of content analysis (categorization of the data) and thematic analysis (pattern analysis, coding based on themes). We sought to have a wide array of documents from each case study group and from two Departments within the Federal government to ensure completeness, comprehensiveness and balance, although note that the number of available documents for each case study group was limited. Relevancy was determined based on the articulation of goals, strategic plans or purposes for Indigenous affairs in general and ILSMPs in particular, and needed to be drafted by the groups themselves or their consultants who directly involved the groups in drafting the document. Relevant documents from the Departments' online databases were sourced, and each Department was also directly approached to obtain the documents that they felt best represented their Department's goals for Indigenous affairs, particularly as it related to ILSMPs. We sourced a total of nine documents across the five case studies, and 22 documents

related to Indigenous affairs or intended ILSMPs outcomes as articulated by the State.

A significant number of diverse relevant or potentially relevant government documents were sourced, reflecting the complexity of Indigenous programmes and policies generally, and as they relate to ILSMPs. As an example, within the Department of Environment and Energy alone, programmes with an Indigenous focus sit within the Biodiversity Conservation Division; Heritage, Reef and Marine Division; Parks Australia; Commonwealth Environmental Water Office; Knowledge and Technology Division; Climate Change Division; Environment Standards; and the Great Barrier Marine Park Authority; with corporate documents relating to Indigenous outcomes including Divisional Plans, the Indigenous Employment and Capability Strategy, Annual Reports, and the Corporate Plan (Saboisky pers. comm.). No overarching summary or framework documents that articulated the Department's vision for Indigenous affairs or investments in ILSMPs was found. Thus the documents presented here, gained through the Departments' online databases and advice from within the Departments may be representative but not exhaustive. All sourced documents were thus skimmed, with a conclusion being made that two flagship government policies, Closing the Gap and the Indigenous Advancement Strategy, best reflected the narrative of intended development outcomes. Documents relating to these two policies were thus coded thematically using themes generated by the initial community workshop, or by additional themes not identified during the workshop.

2.5. Analysis

Vision mapping data was coded into cross-group themes using NVIVO 11 (QSR International 2015) by the primary author. Case study community documents were then analysed based upon these themes. It should be noted that the lack of a specific cited vision/goal should not indicate that that particular goal is not also considered important by the group to some degree, rather that it did not emerge during either the workshop or in the particular documents examined. Each group's stated link between their thematic visions and ILSMPs was then recorded, including whether this stated link was prompted or unprompted to indicate relationship strength. Case study groups were given the opportunity to check these themes, and one group took up this opportunity, but the potential inseparability of both the raw data and some of the emerging themes is acknowledged.

3. Case study context in regards to ILSMPs

The traditional estates of Australia's Indigenous people were colonized by Europeans from 1788 onwards, with subsequent dispossession and marginalization of the estates' first peoples. Internationally, many Indigenous peoples consider it to be critically important for them to regain ownership and/or control over their traditional lands, believing their land to be inseparable from themselves, their culture, and their identity (Anderson et al., 2005; Anderson, Dana, & Dana, 2006) and seeing this as an important precondition for improving their socio-economic circumstances. Today, the legal recognition of Indigenous use and ownership rights to manage natural resources (country) exists in diverse forms across Australia. The Native Title Act 1993[1] enables Indigenous groups to claim recognition of their traditional rights and interests to their land and sea country, with this Federal legislation supported by diverse laws at lower administrative levels (e.g. see Holmes, 2011). Whilst the Native Title Act 1993 marked an important step towards full land rights, it is important to note that Native Title does not usually grant an exclusive use or ownership of land through tenure; rather, the legislation recognises a right to share that land (Crumb, 2017).

The Native Title Act 1993 has led to 34% of the country being recognized for Native Title (Commonwealth of Australia, 2017). Whilst The Act is national legislation, it interacts differently at lower jurisdictional levels (Australian Law Reform Commission, 2015). Extinguishing tenures (such as on pre-existing freehold tenure) mean that the ability of Indigenous peoples to gain or convert Native Title into desired uses varies significantly across jurisdictions: the dominance of freehold title in Queensland effectively limits the use rights that Native Title holders have in their traditional homelands compared to their Northern Territory counterparts where Aboriginal freehold has existed since the 1970s, for example (Australian Law Reform Commission, 2015).

A number of different or additional institutional arrangements related to country and its management exist in addition to Native Title. Indigenous land use agreements,[2] for example, can be made between Native Title holders and other land-users in relation to access and use rights, including for Indigenous land management. These currently cover 30.2% of the country's area (Commonwealth of Australia, 2017). Such agreements can offer significant opportunities for the Indigenous groups to benefit from the granting of Native Title (Smith, 1998), however, such agreements have not always been

found to be successful in generating benefits for the Indigenous communities involved (Campbell & Hunt, 2012). Indigenous Protected Areas (IPAs), agreement-based arrangements under Categories 5 and 6 of the International Union for Conservation of Nature,[3] allow Indigenous people to access and manage an area over which they have Native Title. These agreements have contributed substantially to the meeting of the National Reserve System targets since 1997; IPAs comprise 40% of Australia's national reserves – 75 dedicated areas covering more than 67 million hectares – with plans to surpass 50% coverage by 2020. This will be equivalent to around 10% of the Australian continent (Smyth, 2015). State and Territory governments have also increasingly engaged Indigenous people in both the governance and management of other protected areas (Ross et al., 2009). Thirty two of 87 Northern Territory parks and reserves are now managed jointly between the Territory government and traditional owners, for example (Northern Territory Government, 2017). ILSMPs are the primary way in which IPAs and other areas under Native Title are managed for environmental values. Each of the case study groups for this research have Native Title over their traditional homelands, and either engage in State or Federally funded ILSMPs over their IPAs, or other parts of their traditional estate. More details for each case study group can be found in Table 1.

4. What constitutes development?

4.1. Communities

Sen's conceptualization as 'development as freedom', whereby development entails linked freedoms including political freedom and transparency in relations, freedom of opportunity and economic protection from poverty (Sen, 1999), aligned with the primary framing of community goals by all case study groups as 'control, leadership, empowerment and independence' (Tables 3 and 4). During workshops, this freedom was consistently expressed as a desire for autonomy of land-use, economic independence from government and having a more powerful voice in benefit-sharing arrangements on country. The primacy of this vision was also paralleled in examined documents in relation to management of country:

> "Our vision gives us the direction for where we want to go: ... We want to be in control: we want to control access to our country and educate visitors on our country. We want to be involved in all levels of decision-making and management of our country and IPA. We want to act with respect to country, uphold traditional responsibilities and recognize and respect the rights of Traditional Owners." (Yanunijarra, p. 8, Ngurrarawarnti Wulyu Martarnupurru 2012–2022 – Ngurrara Healthy Country Plan 2012–2022).

The case study approach used for this research means that the data presented here may not be representative to all Indigenous communities. Nevertheless, the high level of consistency between communities in the primacy of the vision suggests it is likely that other communities feel similarly. For some groups (such as for the Gooniyandi group), 'control, leadership, empowerment and independence' was explicitly expressed as higher order, encapsulating other lower order goals. Many of these lower order goals

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[1] https://www.legislation.gov.au/Details/C2017C00178.

[2] These voluntary agreements enable Native Title groups and other parties to reach agreement over the conditions by which the other parties can access or use the land, and the terms by which the native title group can benefit from the access to or use of their lands (http://www.nntt.gov.au/ILUAs/Pages/default.aspx).

[3] Category 5 refers to protected areas managed mainly for landscape/seascape conservation and recreation. These consists of areas of land, with coast and sea as appropriate, where the interaction of people and nature over time has produced an area of distinct character with significant aesthetic, cultural and/or ecological value, and often with high biological diversity (e.g. The *Kanju* IPA east of Coen). Category 6 categorises protected areas managed mainly for the sustainable use of natural ecosystems. These consist of areas containing predominantly unmodified natural systems, managed to ensure the long-term protection and maintenance of biological diversity, while providing at the same time a sustainable flow of natural products and services to meet community needs (e.g. The *Eastern Kuku Yalanji* IPAs).

Table 3

Thematic community goals identified during document analysis. Themes in italics are those that were identified during the document analysis but not in the workshops. Blank = not mentioned specifically, or mention better captured by an alternative theme, ✔ = mentioned, ✔✔ = frequently and repeatedly mentioned throughout. [1] = Ewamian Aboriginal Corporation Strategic Plan 2016 2021, Talaroo IPA Plan of Management, Talaroo Springs Management Plan, NQLC Annual Report 2015–2016 [2,3,4,5] = draft or finalized Healthy Country Plans.

	Queensland	Western Australia			
	Ewamian[1]	Bidan[2]	Bunuba[3]	Gooniyandi[4]	Yanunijarra[5]
Control, leadership, empowerment and independence	✔✔	✔✔	✔✔	✔	✔✔
Appropriate economic development	✔✔	✔	✔✔	✔	
Employment and training	✔✔	✔	✔	✔	✔
Improved relationships and respect for our way outside community	✔✔	✔	✔		✔
Inter and intragenerational knowledge transfer of culture	✔	✔✔		✔	✔✔
Community cohesion and wellbeing	✔✔	✔		✔	
On-country infrastructure and services	✔				
Access and control over country	✔✔	✔✔	✔	✔	✔✔
Benefit sharing from country		✔			
Two way learning		✔			✔
Language	✔	✔		✔	
Looking after country	✔	✔✔	✔✔	✔✔	✔✔
Community sustainability		✔		✔	
Appropriate educational development					
Connecting to culture and country the right way		✔	✔	✔	✔
Strong governance	✔✔				
Heritage site and cultural protection	✔				
Healthy lives				✔	
Effective management of Native Title interest and assets	✔				

Table 4

Stated contributions of ILSMPs to thematic community goals, using data drawn from workshops. Visions are in order of most frequently cited to least frequently cited. ✔ = contribution stated. X = no contribution stated. Dashes denote that that particular vision was not explicitly identified by the particular case study group.

	Qld		WA						Gooniyandi	
	Ewamian		Bidan		Bunuba					
Yanunijarra										
	U	P	U	P	U	P	U	P	U	P
Control, leadership, empowerment and independence	X	X	✔	✔	✔	✔	X	✔	✔	✔
Appropriate economic development	X	X	–	–	X	X	X	✔	X	✔
Employment and training	X	✔	✔	✔	X	✔	–	–	✔	✔
Improved relationships and respect for our way outside community	–	–	–	–	X	X	X	X	✔	✔
Inter and intragenerational knowledge transfer of culture	–	–	–	–	X	✔	X	✔	✔	✔
Community cohesion and wellbeing	X	X	–	–	X	X	X	X	–	–
On-country infrastructure and services	X	X	X	X	–	–	X	X	–	–
Access and control over country	X	X	–	–	–	–	–	–	✔	✔
Benefit sharing from country	–	–	–	–	–	–	X	X	X	✔
Two way learning	–	–	–	–	X	X	X	✔	–	–
Language	X	X	–	–	–	–	X	✔	–	–
Looking after country	–	–	–	–	–	–	–	–	✔	✔
Community sustainability	–	–	X	X	–	–	–	–	–	–
Appropriate educational development	–	–	–	–	–	–	X	✔	–	–

align more with Sen's functionings than freedom per se. Whilst some of these may have been more usefully framed as facilitators of 'control, leadership, empowerment and independence,' others may be better understood as being facilitated by 'control, leadership, empowerment and independence'. This issue of directionality and lack of clarity around whether such goals are functionings in themselves or a conversion factor was described by Binder (2014) as the 'circularity problem'.

The timeline data revealed that the ways in which 'control, leadership, empowerment and independence' was practically visualized and realized changed through time, for both reasons of hysteresis and a changing context of access constraints. That is, the most relevant functionings towards the realization of freedom was often mediated by the access context, particularly in relation to institutions and financial resources. For all groups, this process was expressed as beginning with land rights; groups coming together to capitalize on new Native Title legislation to regain State recognition of their rights of access and freedom of use over their traditional country. Freedom, at its core, was thus conceptually inseparable from rights of access to country in all groups. Whilst

gaining State recognition of country led directly to some level of empowerment, only with the platform of State recognition were groups then able to work towards a fuller vision of 'control, leadership, empowerment and independence' through other intermediate steps such as, for example, infrastructure development, strong championing representative organisations and employment in formal ILSMPs. For the Ewamian, Native Title was particularly significant due to a more severe form of dispossession associated with the historical dominance of freehold pastoral properties in their traditional country in Queensland which gave more rights to pastoral landholders than in Western Australia. That is, the Ewamian experienced a stronger institutional access constraint than other case study groups. For this group, the process of gaining Native Title was particularly important for community, and community and country, re-establishment. Only after this initial phase could the focus shift towards, for example, appropriate economic development.

Appropriate economic development was the next most frequently cited goal in all groups, with 'appropriate' meaning economic development that adhered to community understandings

of respectful relationships with country and culture. Highlighting the 'circularity problem' again (Binder, 2014), appropriate economic development was seen as both an end point functioning and a means by which a fuller notion of freedom could be achieved. Four out of the five case study groups cited appropriate economic development specifically but all groups aimed towards jobs and economic opportunities on country or in the communities in which people lived. More specifically, groups desired small business development and viable enterprises that leveraged their Native Title determinations, and fee-for-service arrangements. For the Yanunijarra group, economic development was about partnering in development, *'doing business on our terms'* (Yanunijarra, workshop), and being in a position of strength in negotiations rather than simply about employment and training for individuals. As such, appropriate economic development was seen as being intrinsically tied to 'control, leadership, empowerment and control', rather than being a standalone end point in itself.

The goal of appropriate economic development was less consistent between groups in examined documents (Table 3), perhaps representing a sampling bias as the examined documents specifically focused on managing country. The Yanunijarra group's Ngurrarawarnti Wulyu Martarnupurru 2012–2022 – Ngurrara Healthy Country Plan 2012–2022 did not include reference to appropriate economic development as part of its vision for country. However the Gooniyandi group explicitly linked economic development and management of country in its vision:

"Our vision shows those goals we want to achieve over the next ten years in order to keep our culture and country healthy so that the next generation still can enjoy our traditional lands... We want to create economic opportunities to look after country in a sustainable way... [and] Our young people can live a healthy lifestyle on country and gain an income from country". (Gooniyandi, p. 6–7, Corporation & Council, 2015)

Other community goals tended to vary between groups. Improved relationships and respect for each group's way and worldviews was highly cited, but most of this desire was explicitly expressed during workshops by two case study groups (Gooniyandi and Yanunijarra). Despite not forming part of the formalized workshop vision, the Ewamian group (Table 4) also expressed a desire for improved relations and respect. A key priority was to:

"increase interaction with... external stakeholders to encourage transparency and good governance, relationship building and partnership formation" (Ewamian, p. 2 Ewamian Strategic Plan 2016–2021)

This priority was largely seen as a means to freedom, assisting Ewamian to achieve its primary understanding of freedom:

"Participant 1: we were able to build that really good, strong relationship, you know, with the council, with Northern Gulf... yeah just stakeholders in the Etheridge Shire. Yeah I think it actually helped us." (Ewamian, workshop)

The Bunuba group similarly recognized improved relationships as important intermediate steps towards 'control, leadership, empowerment and independence':

"Although our eventual goal is to manage and have control over all our land, we understand the importance of working with pastoralists, local government and conservation departments that currently manage Bunuba country. We have a strong history of identifying and developing solid working relationships with key individuals and organisations that can help Bunuba further..." (Bunuba, p. 42, Jalangurru Muwayi – Bunuba Healthy Country Plan, 2017–2027 (draft)).

On-country infrastructure and services, and benefit sharing from country were also frequently cited lower order or intermediate goals or functionings. Most of these were also viewed as largely inseparable from each other, with positive feedback loops between them. For example, the desire for on-country infrastructure and services often dovetailed into other goals; the Gooniyandi desire for on-country infrastructure for the next generation to learn about country and language and to help look after troubled children was largely inseparable from desires for community cohesion and well-being, and inter and intragenerational knowledge transfer of culture.

Community sustainability and appropriate educational development were cited infrequently during workshops (Table 4), and/ or were also only cited indirectly in the documents examined (Table 3). For example, Bunuba included the Yiramalay Studio School on their timeline of historical events important towards achieving their community goals, and noted *"We have created a unique educational partnership with Melbourne's Wesley College, the Yiramalay Studio School on Yarrangii, providing high quality education and life experience to Kimberley kids and Wesley kids from Melbourne"* (Bunuba, p. 17, Jalangurru Muwayi – Bunuba Healthy Country Plan, 2017–2027, draft) but did not emphasise the explicit link between educational development and community goals in either the workshop or the documents examined. In another example, for Bidan community sustainability (in terms of a sustainable population) was related to economic viability (the provision of local employment and schooling), and thus may be more usefully represented as appropriate economic development:

"So [within community training and employment is] *kind of been seen at the moment I guess as a catalyst to do a number of things that we want to get done.... as we get more people out here, then all of a sudden you have a bus service for the kids who are at school and that then opens up more doors."* (Bidan, workshop)

In summary, the overall theme of 'control, leadership, empowerment and independence', followed by appropriate economic development and employment and training were relatively consistent community goals. These goals share some overlap, but also depart at significant junctures, from historical and emerging State goals related to Indigenous affairs.

4.2. State actors

The Department of Prime Minister and Cabinet's i) Closing the Gap initiative of the Council of Australian Governments (Commonwealth of Australia, 2018), and ii) Indigenous Advancement Strategy (IAS) (Commonwealth of Australia, 2016) are primary articulations of the State's goals in Indigenous affairs, providing overarching narratives informing much of the direction, and justification for, many other programmes (e.g. Working on Country environmental programmes, Commonwealth of Australia, 2013). As such, their targets and priority investment areas act as surrogates of State goals for Indigenous affairs. There are significant overlaps between them. Currently, the Closing the Gap targets include closing the attainment gap between Indigenous and non-Indigenous Australians in life expectancy, child mortality, early childhood education, school attendance, literacy and numeracy, year 12 attainment and employment (Commonwealth of Australia, 2018). The overall intended outcome of the Indigenous Advancement Strategy is to improve results for Indigenous Australians in relation to school attendance, employment and community safety, with program objectives related to i) jobs, land and economy; ii) children and schooling; iii) safety and wellbeing, iv) culture and capabilities, and v) remote Australia strategies (p. 6, Commonwealth of Australia, 2016). The underpinning assumption

of these priorities is that education has a positive impact on the future success of individuals, families and communities; employment, economic development and social participation improves people's lives and that the right conditions and incentives are needed for Indigenous Australians to participate in the economy and broader society; and that growing up in a healthy and safe home and community, particularly one that is non-violent, is essential for families to thrive. These goals are generally presented as targets, or development outcomes in themselves, thus drive many development-related government initiatives.

The Closing the Gap targets largely align with Sen (1999) functionings. However their disparity with important community goals echoes criticisms about properly accounting for freedom, agency and pluralism (e.g. Klein, 2016; Srinivasan, 2007), thus making them susceptible to being used to create fixed lists of functionings that ignore social justice (see Srinivasan, 2007) and personal and social values. The Closing the Gap targets as a set are assumed to lead additively to a particular form of freedom (e.g. engagement in the market economy), rather than representing freedom in itself. Whilst communities cited the Closing the Gap target of employment relatively frequently as community goals, and are unlikely to disagree that other State identified goals are important (see e.g. Kimberley Language Resource Centre et al., 2010), community focus tended to be on more process-based, relational and strategic goals that could then facilitate the achievement of desired functionings. That is, community goals recognized that freedom is greater than the sum of functionings as it allows the community to choose the functionings to pursue in achieving things important to them as well as expanding available capabilities (Sen, 1993). Communities' overall conceptualization of freedom as 'control, leadership, empowerment and independence' is largely missing from current Closing the Gap targets. Similarly, the focus of the Indigenous Advancement Strategy on objectives such as adult employment, business development and school attendance is somewhat separate to community conceptualization of freedom, although the Strategy's objective to ensure '*investments in local, flexible solutions based on community and Government priorities*' (p. 17, Australian National Audit Office, 2017) at least partially acknowledges the community wish for more autonomy.

In recognizing that the State needs to better work with Indigenous groups to identify priorities to inform the design and delivery of programmes and services (Closing the Gap The Next Phase Public Discussion Paper, 2017), Closing the Gap targets are now being 'refreshed' in consultation with Indigenous groups. Whilst this process is still in progress, initial documents appear to more explicitly acknowledge the need for a strengths-based approach, and that '*prosperity is about moving beyond wellbeing to flourishing and thriving*' including by Indigenous people '*having the economic empowerment to be the decision-makers over issues that impact their lives, and to seize opportunities for themselves, their families and communities*' (p. 4 Closing the Gap The Next Phase Public Discussion Paper, unknown year). As such, the State has made an explicit call for Indigenous people to make submissions '*that capture our broadest vision for the future of Aboriginal and Torres Strait Islander Peoples and provide a sound basis for determining priorities, developing policy and tracking success or failure over time*' (p. 5 Closing the Gap The Next Phase Public Discussion Paper, unknown year). State goals in Indigenous affairs will be thus, in theory, more cognizant of community conceptualisations of freedom in future, recognizing that communities should be allowed to select what is in effect a capability set for their own development, rather than having specific pre-defined functionings used to both guide investments and measure development success. However, the 'prosperity' framing pre-empts this process. As such, how community conceptualisations of freedom manifest on the ground remains to be seen.

5. How do ILSMPs contribute to development as freedom?

The State cites research, some of which it has commissioned, that links ILSMPs to current Closing the Gap targets. Some of these targets also overlap with community stated goals. ILSMPs are strongly linked to both the Closing the Gap target, and the higher level community goal, of employment (e.g. p. 2, Draft Supporting Evidence: Supporting Closing the Gap outcomes through ILSM; Turnbull, 2010; Tables 3 and 4). Although not a Closing the Gap target, participation in ILSMPs is seen by the State to support relationships and partnerships between Indigenous and non-Indigenous people and organisations, and between Indigenous elders and younger people (p. 4, Draft Supporting Evidence: Supporting Closing the Gap outcomes through ILSM). These parallel stated mid-level community goals of 'improved relationship and respect for our way outside community' and 'inter and intragenerational knowledge transfer of culture' (Tables 3 and 4). The provision of meaningful employment through ILSMPs are also seen to support functional families and greater social cohesion, which aligns with the less frequently cited community goal of 'community cohesion and wellbeing' (Tables 3 and 4). The State also cites a relationship between ILSMPs and Closing the Gap related targets that do not overlap with stated community goals, including participation in Working on Country programmes and the uptake of more exercise, lower rates of obesity, diabetes, renal disease and cardio-vascular disease, which are then presumed to contribute to the Closing the Gap target of life expectancy (p. 3, Draft Supporting Evidence: Supporting Closing the Gap Outcomes through ILSM; Commonwealth of Australia, 2013). It also cites evidence that Working on Country programmes have improved educational outcomes (school attendance target) through children seeing family members engaged in meaningful employment which reinforces the value of education and increases school attendance, especially where rangers and traditional owners are involved in the school curriculum. The link made by the State between ILSMPs and community goals of 'control, leadership, empowerment and independence' is explicit.

In contrast, the stated (prompted or unprompted) contribution of ILSMPS to community understandings of freedom were mixed (Table 4). Unprompted, or with unprompted and prompted combined, communities linked ILSMPs most strongly to control, leadership, empowerment and independence, followed by employment and training. Paralleling the perceived relationship by the State, three of the five groups were unprompted in linking ILSMPs to inter and intragenerational knowledge transfer of culture, with two groups unprompted linking employment and training (although an additional group made this link when prompted). Only low levels of linkages were made between frequently or moderately frequently cited goals of appropriate economic development, access and control over country, looking after country and benefit sharing from country. No prompted or unprompted links were made by any group between ILSMPs and community goals of on-country infrastructure and services, community cohesion and well-being, community sustainability and increased resourcing and resource independence but only on-country infrastructure and services was in the top five most frequently cited visions.

The primary goal of 'control, leadership, empowerment and independence' was particularly mixed, with only two of the five groups linking ILSMPs with this freedom unprompted, and four of the five linking it prompted. The reasons for this variation is best illustrated by understanding historical context (elicited through the developed timelines) to compare and contrast a group that cited ILSMPs as a significant driver of this freedom (Yanunijarra) with one that did not make a strong explicit link (Ewamian). For the Yanunijarra, ILSMPs have been instrumental in helping the

group achieve freedom to date. Yanunijarra had their first Native Title determination in 2007. That same year, off the back of this determination, the Warlu Jilajaa Jumu Indigenous Protected Area, was declared. With a four million dollar funding commitment as part of the ranger and Working on Country programme for the IPA, the Yanunijarra Aboriginal Corporation RNTBC then began managing a team of male and female rangers, associated ranger coordinators and a country manager. These suite of ILSMP programmes was seen as an important platform by which other community goals could be leveraged. To begin with, there was "*No funding and it's hard for PBC now to get funding. The government only put $50,000 a year for PBC to run their meetings, four meetings a year and it's not enough to put anything together… Yeah, because PBC have no money we piggyback on our ranger program.*" (Yanunijarra, workshop).

This 'piggybacking' constituted a cross-subsidisation of governance and administrative support for Yanunjarra to continue towards its other, perhaps higher priority, goals. It also constituted a cross-subsidisation of financial capital for expensive on-country activities that, whilst nominally intended for environmental activities by funding bodies, also facilitated intergenerational knowledge transfer via back to country visits for other community members. Importantly, it financially subsidised on-country access which helped Yanunjarra build its case towards a second Native Title determination, which was granted in 2015. The causal link between the ILSMPs, and other important events linked to the community's overall vision, was therefore clear: without the programmes, Yanunijarra's – 'control, leadership, empowerment and independence' may have been difficult to realise within the same timeframe due to an inability to overcome access constraints. Other lower level goals, such as improved relationships and respect for our way outside community, employment and training, access and control over country, looking after country and inter and intergenerational knowledge transfer of culture, may also have languished.

In contrast, ILSMPS, whilst valued by the Ewamian group, were only seen as prompted contributors to the community goal of employment and training. Timeline data showed that Ewamian were granted Native Title over their traditional estate in 2013. However most of their traditional estate is also covered by freehold tenure, which extinguishes full Native Title rights over that land. To fully control and receive benefits from their traditional estate, Ewamian were required to purchase, or have purchased on their behalf, freehold land. Ewamian had initially sought to acquire a property on their traditional estate, with elders within their community hoping to run that property as a pastoral enterprise. A lack of funds meant the property sale could not proceed. Later, Ewamian, due to their historical connection to the property Talaroo, wished to again attempt a purchase. A lack of funding, again, meant they were not able to purchase it outright. However, there was an option to co-fund the purchase of Talaroo in order to convert it into an Indigenous Protected Area. To gain access to their traditional estate, Ewamian decided to proceed whilst accepting the condition that the property would be managed as an IPA in 2014. One of the conditions of this arrangements was that a ranger group was required to manage the property for environmental purposes. At that time, the Northern Gulf Resource Management group had unexpected funding that they also wished to see spent on land management, thus the Ewamian ranger group was formed. After several years of the Ewamian being required to demonstrate appropriate management of Talaroo, the co-purchaser, Indigenous Land Corporation, handed back Talaroo to full control by Ewamian, and it was formally dedicated as an IPA. Whilst Ewamian continue to run ILSMPs on Talaroo as per their purchase conditions, they are strong in their vision to opportunistically and pragmatically leverage the purchase to develop a cultural tourism operation that will provide more diverse employment opportunities, facilitate access to country, provide economic development, and grow community cohesion and wellbeing (authors' emphasis):

> "Participant 1: I think we're really working towards being a leader in the tourism industry in that area…
>
> Participant 2. Yeah, cultural tourism with that. So, at the moment Talaroo's our drawcard for that because that's something we have full control over. But the vision is to be able to tap into broader traditional areas…. And taking our people with us is a big key part of that. So, you know, training is a big part of that, capacity building…
>
> Participant 3: Yeah. Talaroo is available for us right now, so that's why we use it as a base, see if we can run things off that, you know what I mean… Yeah [use it as a platform]" (Ewamian, workshop)

The Ewamian group still cite employment benefits for Ewamian people from the ILSMPs. However the historical context suggests that, in general, the ILSMP programmes can be viewed more as an institutional pre-requisite that was needed to be filled in order to overcome access constraints towards other functionings, rather than necessarily being viewed as either the end point or shortest path towards achieving these functionings.

6. Access, freedom and ILSMPs

Communities will only embrace CBNRM as a long-term livelihood strategy if it proves attractive to them in terms of real, meaningful, tangible benefits that offset costs (Rozemeijer & van der Jagt, 2000); that is, where they feel CBNRM can make a net contribution towards their specific understanding of freedom. The variability in contribution of ILSMPs to freedom and functionings suggests that contribution is mediated by both access mechanisms and understandings of freedom. Both access mechanisms and understandings of freedom are unique to a context that is multi-levelled (e.g. local and National), spatially variable (e.g. Queensland versus Western Australia; traditional estate-by-estate), dynamic and characterised by hysteresis. The theory of access (Ribot & Peluso, 2003) posits that structural and relational access mechanisms such as knowledge, markets, capital, technology, labour, authority, social relations and social identity, in addition to rights-based access mechanisms, mediate the ways in which communities can benefit from natural resources. The need for Indigenous communities to access capital to realise connection to country accrues other costs and thus requires temporary or permanent trade-offs with either some of these access mechanisms, or the process-based striving for development as understood by the community. For example, funding requirements for ILSMPs can constitute an extension and bureaucratization of State power into the communities in which they are supposed to be empowering (Fache & Moizo, 2015; Fache, 2014; Nadasdy, 2005); communities must thus decide whether this cost is counterbalanced by the access to financial capital that, in turn, allows access to country. The particular access context in which CBNRM exists will therefore determine whether a community initially engages with CBNRM and whether it continues to stay engaged with CBNRM into the future.

For most of the case study groups examined, rights based access to country (in the form of Native Title) predicated ILSMPs. For the Ewamian, the particular form of rights based (institutional) access was incomplete due to the extinguishment of Native Title under the freehold land tenure that dominates their traditional estate. Access to capital was thus required for the group to benefit from their traditional estate, which itself required the development of formalized relationships to obtain; ILSMPs were a condition of that relationship and related accessing of capital. For the Yanunijarra, whose more arid traditional estate had largely remained Crown (public) land, freedom was not completely restricted through the

same institutional access constraints but, rather, access to capital that could be then used to access country i) as an end in itself, as well as ii) to overcome additional access constraints. ILSMPs provided capital, authority in the form of governance mechanisms and, perhaps, the reinvigorated knowledge of country required to successfully demonstrate ongoing connection to country as required by Native Title, thus to access the further Native Title determinations that the group now see as providing other desired freedoms (including appropriate economic development). As these two examples illustrate, access, freedom and the ultimate sustainability of CBNRM programmes are intrinsically linked.

State actors, through their directing of investments, can seek to support community understandings of freedom. In the examples presented in this paper, the State recognised that community empowerment is an important precursor to freedom to some extent. However instead of conceptualising freedom as community 'control, leadership, empowerment and independence', the State was more likely to understand freedom in a way that was more in line with Sen's functionings: a person's opportunity and ability to generate outcomes that the State (rather than an Indigenous individual) see as valuable, such as closing the gap between Indigenous and non-Indigenous school attendance rates. In contrast, the communities' consistent and overwhelming focus on 'control, leadership, empowerment and independence' aligns more closely with Sen's opportunity freedoms and agency. Communities wish to have the agency to select their own capability set. Access constraints, in particular capital and institutions, restrict this agency. In essence, communities place greater weight on agency than functionings, whereas the opposite is true for State actors. ILSMPs are thus one resource of many available to communities to overcome these access constraints.

This disparate weighting can lead to a complex relationship between State and communities involved in CBNRM. Amongst the communities examined here, some were likely explicit in the 'control, leadership, empowerment and independence' goal because they felt it maximized opportunity freedoms. They strove towards opportunity freedoms as a way of circumventing short-term State funding that sought to incentivize particular State-preferred functionings (e.g. such as school attendance). It is important to note that communities did not necessarily disagree that these functionings were important; the Kimberley Language Resource Centre et al. (2010) explicitly states "*Caring for Country [ILSMP] work in the Kimberley is a big success story*" (p. 9), for example. However local groups wished to have the agency to be able to select these functionings themselves. Those groups who were most enthusiastic about ILSMPs were those that were able to use ILSMPs to leverage opportunity freedoms and agency.

7. Conclusion

Communities seeking to use and manage natural resources towards development are often constrained by a lack of Ribot's access to these natural resources. CBNRM that seeks to help develop communities can assist in overcoming access issues, but often there is a lack of shared understanding between funders and communities about what constitutes a developmental benefit. In the Indigenous communities involved in this research, development was framed as Sen's 'freedom' rather than a specific capability list; this is also likely to be the case in other communities through Australia and internationally. Communities are unlikely to be engaged in community based NRM programs in the long-term where this understanding of development is not met. There are opportunities for CBNRM to be designed in ways that place greater weight on freedom, and ability to overcome access constraints. By shifting the focal weight from functionings towards agency in CBNRM investments, the multiple benefits that have

already been realized and well-recorded are likely to be enhanced, expanded and, ultimately, more sustainable as communities are more able to overcome access constraints. A shift in funding conditions, such as towards those that have less prescriptive conditions in terms of scope, intended funding outcomes or mechanisms, are likely to better contribute to community views of freedom. So too is the co-development of funding programs with communities and a commitment to achieving community defined social and economic goals. Programme shifts such as these, which better assist communities to realise development as freedom, will ultimately ensure a longer-term commitment and engagement in CBNRM.

Declaration of interest

Author contribution

Jane Addison: Input into research design, data collection, analysis, write-up.

Natalie Stoeckl: Acquired funding, assembled research team and partners, input into research design, data collection, review/editorial role.

Silva Larson: Input into research design and analysis, review/editorial role.

Diane Jarvis: Input into research design, data collection, review/editorial role.

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Bunuba Dawangarri Aboriginal Corporation RNTBC: provided data and intellectual property, review/editorial role.

Ewamian Aboriginal Corporation RNTBC: provided data and intellectual property, review/editorial role.

Gooniyandi Aboriginal Corporation RNTBC: provided data and intellectual property, review/editorial role.

Yanunijarra Ngurrara Aboriginal Corporation RNTBC: provided data and intellectual property, review/editorial role.

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Appendix A. Supplementary data

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References

Agrawal, A., & Gibson, C. (2001). The role of community natural resource conservation. In A. Agrawal & C. Gibson (Eds.), *Communities and the environment: ethnicity, gender and the state in community-based conservation* (pp. 1–31). New Brunswick: Rutgers University Press.

Alkire, S., & Deneulin, S. (2009) The human development and capability approach. In: S. Deneulin, L. Shahani (Eds.), An introduction to the Human Development and Capability Approach – Freedom and Agency (pp. 22–48). Earthscan, IDRC.. ISBN: 9781844078066. 354.

Anderson, R. B., Camp Ii, R. D., Dana, L. P., Honig, B., Nkongolo-Bakenda, J.-M., & Peredo, A. M. (2005). Indigenous land rights in Canada: The foundation for development. International Journal of Entrepreneurship and Small Business, 2(2), 104–133. https://doi.org/10.1504/IJESB.2005.006809.

Anderson, R. B., Dana, L. P., & Dana, T. E. (2006). Indigenous land rights, entrepreneurship, and economic development in Canada: "Opting-in" to the global economy. Journal of World Business, 41(1), 45–55. https://doi.org/10.1016/j.jwb.2005.10.005.

Australian Law Reform Commission (2015). Connection to Country: Review of the Native Title Act 1993 (Cth) Final Report ALRC Report 126. Commonwealth of Australia.

Australian National Audit Office (2017). Indigenous Advancement Strategy Department of Prime Minister and Cabinet ANAO Report No. 35 2016–17 Performance Audit. Commonwealth of Australia.

Barbour, R. (2007). Doing focus groups. In U. Flick (Ed.), The SAGE qualitative research kit. SAGE Publications.

Bergson, A. (1938). A reformulation of certain aspects of welfare economics. Quarterly Journal of Economics, 52(2), 310–334.

Binder, M. (2014). Subjective well-being capabilities: Bridging the gap between the capability approach and subjective well-being research. Journal of Happiness Studies, 15(5), 1197–1217.

Bollig, M., & Schweiger, D. (2014). Fragmentation, cooperation and power: institutional dynamics in natural resource governance in north-western Namibia. Human Ecology, 42, 167–181.

Bowen, G. (2009). Document analysis as a qualitative research method. Qualitative Research Journal, 9(2), 27–40.

Brooks, J. S., Waylen, K. A., & Mulder, M. B. (2012). How national context, project design, and local community characteristics influence success in community-based conservation projects. Proceedings of the National Academy of Sciences, 109 (52), 21265–21270.

Brooks, J., Waylen, K. A., & Mulder, M. B. (2013). Assessing community-based conservation projects: A systematic review and multilevel analysis of attitudinal, behavioral, ecological, and economic outcomes. Environmental Evidence, 2, 2.

Brosius, J., Tsing, A., & Zerner, C. (1998). Representing communities: Histories and politics of community-based natural resource management. Society and Natural Resources, 11, 157–168.

Bulloch, H., & Fogarty, W. (2016). Freeing the 'Aboriginal Individual': Deconstructive 'Development as Freedom' in remote Indigenous Australia. Social Analysis, 60(3), 76–94.

Bunuba Dawangarri Aboriginal Corporation (2017). Jalangurru Muwayi: Bunuba Healthy Country Plan. Keeping Bunuba People and Country Healthy 2017–2027. Working Draft v10.

Campbell, D., & Hunt, J. E. (2012). Achieving broader benefits from Indigenous land use agreements: Community development in Central Australia. Community Development Journal, 48(2), 197–214.

Carbone, J. C., & Smith, V. K. (2013). Valuing nature in a general equilibrium. Journal of Environmental Economics and Management, 66(1), 72–89.

Chiu, L. (2003). Transformational potential of focus group practice in participatory action research. Action Research, 1(2), 165–183.

Closing the Gap The Next Phase Public Discussion Paper. (2017). Available: https://closingthegaprefresh.pmc.gov.au/sites/default/files/resources/ctg-next-phase-discussion-paper.pdf.

Commonwealth of Australia. (2013). Draft Supporting Evidence: Supporting Closing the Gap Outcomes through ILSM.

Commonwealth of Australia. (2016). Indigenous Advancement Strategy Grant Guidelines, March 2016, Amended May 2016.

Commonwealth of Australia. (2017). Native Title Tribunal. Available: http://www.nntt.gov.au/.

Commonwealth of Australia (2018). Closing the Gap Prime Minister's Report 2018. Department of the Prime Minister and Cabinet.

Cooke, B., & Kothari, U. (2001). Participation: The new tyranny? London: Zed Books.

Crumb, N. (2017). Native Title is not 'land rights'. SBS.com.au. Retrieved from: https://www.sbs.com.au/nitv/article/2017/06/22/native-title-not-land-rights.

Davies, J., Campbell, D., Campbell, M., Douglas, J., Hueneke, H., LaFlamme, M., ... Walsh, F. J. (2011). Attention to four key principles can promote health outcomes from desert Aboriginal land management. The Rangeland Journal, 33, 417–431.

Deneulin, S., & McGregor, A. (2010). The capability approach and the politics of a social conception of welllbeing. European Journal of Social Theory, 13(4), 501–519.

Dressler, W., Büscher, B., Schoon, M., Brockington, D., Hayes, T., Kull, C. A., ... Shrestha, K. (2010). From hope to crisis and back again? A critical history of the global CBNRM narrative. Environmental conservation, 37(1), 5–15.

Fache, E. (2014). Caring for Country, a Form of Bureaucratic Participation. Conservation, Development, and Neoliberalism in Indigenous Australia. Anthropological Forum – A journal of Social Anthropology and Comparative. Sociology, 24, 3.

Fache, E., & Moizo, B. (2015). Do burning practices contribute to caring for country? Contemporary use of fire for conservation purposes in Indigenous Australia. Journal of Ethnobiology, 35(1), 163–182.

Gilligan, B. (2006). The Indigenous protected areas programme 2006 evaluation. Canberra: Department of the Environment and Heritage.

Gooniyandi Aboriginal Corporation and Kimberley Land Council. (2015). Gooniyandi Healthy Country Plan.

Green, D., & Martin, D. (2017). Maintaining the healthy country-healthy people nexus through sociocultural and environmental transformations: challenges for the Wik Aboriginal people of Aurukun, Australia. Aust. Geogr., 48, 3.

Gorman, J., & Vemuri, S. (2012). Social implications of bridging the gap through 'caring for country' in remote Indigenous communities of the Northern Territory, Australia. The Rangeland Journal, 34, 63–73.

Holmes, J. (2011). Land tenures as policy instruments: Transitions on Cape York Peninsula. Geographical Research, 49(2), 217–233. https://doi.org/10.1111/j.1745-5871.2011.00692.x.

Jarvis, D., Stoeckl, N., Addison, J., Larson, S., Hill, R., Pert, P., & Watkin Lui, F. (2018). Are Indigenous land and sea management programs a pathway to Indigenous economic independence? The Rangeland Journal. https://doi.org/10.1071/RJ18051.

Jarvis, D., Stoeckl, N., Hill, R., & Pert, P. (2018). Indigenous land and sea management programs: Can they promote regional development and help 'close the (income) gap'? Australian Journal of Social Issues, 1–21.

Kellert, S. R., Mehta, J. N., Ebbin, S. A., & Lichtenfeld, L. L. (2000). Community natural resource management: promise, rhetoric, and reality. Soc. & Natural Res., 13(8), 705–715.

Kimberley Language Resource Centre Kimberley Aboriginal Law and Culture Centre & Kimberley Land Council and Kimberley Aboriginal Pastoralists Incorporated (2010). Kimberley Aboriginal Caring for Country Plan. Written by Sharon Griffiths and Steve Kinnane. Nulungu Centre for Indigenous Studies. January 2011.

Klein, E. (2016). The curious case of using the capability approach in Australian Indigenous policy. Journal of Human Development and Capabilities, 17(2), 245–259.

Kothari, A., Camill, P., & Brown, J. (2013). Conservation as if people also mattered: Policy and practice of community-based conservation. Conservation and Society, 11(1), 1.

Lane, M., & Corbett, T. (2005). The tyranny of localism: Indigenous participation in community-based environmental management. Journal of Environmental Policy and Planning, 7(2), 141–159.

Larson, S., Stoeckl, N., Jarvis, D., Addison, J., Prior, S., & Esparon, M. (2018). Using measures of wellbeing for impact evaluation: Proof of concept developed with an indigenous community undertaking land management programs in northern Australia. Ambio, 1–10.

Lo, A. Y., & Spash, C. L. (2012). Deliberative monetary valuation: In search of a democratic and value plural approach to environmental policy. Journal of Economic Surveys, 27, 768–789. https://doi.org/10.1111/j.1467-6419.2011.00718.x.

Lockwood, M., & Davidson, J. (2010). Environmental governance and the hybrid regime of Australian natural resource management. Geoforum, 41(3), 388–398.

Mitchelmore, S., & Rowley, J. (2010). Entrepreneurial competencies: A literature review and development agenda. International journal of entrepreneurial Behavior & Research, 16(2), 92–111.

Morgon, D. (1997). Focus groups as qualitative research Qualitative Research Methods Series 16 (2nd ed.). SAGE Publications.

Mukhopadhaya, P. (2002). Efficiency criteria and the sen-type social welfare function. The Indian Economic Journal, 49(4), 106–113.

Murphy, K. (2012). The social pillar of sustainable development: A literature review and framework for policy analysis. Sustainability: Science, Practice and Policy, 8 (1), 15–29.

Nadasdy, P. (2005). The anti-politics of TEK: The institutionalization of co-management discourse and practice. Anthropologica, 47(2), 215–232.

Nilsson, D., Baxter, G., Butler, J. R. A., & McAlpine, C. A. (2016). How do community-based conservation programs in developing countries change human behaviour? A realist synthesis. Biological Conservation, 200, 93–103.

Northern Territory Government. (2017). Joint Management. Department of Tourism and Culture. Accessed 22/08/2018. Available: https://dtc.nt.gov.au/parks-and-wildlife-commission/park-management-strategies-consultation/joint-management.

Ostrom, E. (1990). Governing the commons: The evolution of institutions for collective action. Cambridge University Press.

Pezzoli, K. (1997). Sustainable development: A transdisciplinary overview of the literature. Journal of Environmental Planning and management, 40(5), 549–574.

Porter-Bolland, L., Ellis, E. A., Guariguata, M. R., Ruiz-Mallén, I., Negrete-Yankelevich, S., & Reyes-García, V. (2012). Community managed forests and forest protected areas: An assessment of their conservation effectiveness across the tropics. Forest Ecology and Management, 268, 6–17.

Rawls, J. (1971). A theory of justice. Cambridge, Massachusetts: Harvard University Press.

Ribot, J., Lund, F., & Treue, T. (2010). Democratic decentralization in sub-Saharan Africa: Its contribution to forest management, livelihoods and enfranchisement. Environmental Conservation, 35–44.

Ribot, J., & Peluso, N. (2003). A theory of access. Rural Sociology, 68(2), 153–181.

Riehl, B., Zerriffi, H., & Naidoo, R. (2015). Effects of community-based natural resource management on household welfare in Namibia. PLoS One, 10(5). https://doi.org/10.1371/journal.pone.0125531. Published 2015 May 12.

Ross, H., Grant, C., Robinson, C., Izurieta, A., Smyth, D., & Rist, P. (2009). Co-management and indigenous protected areas in Australia: Achievements and ways forward. Australasian Journal of Environmental Management, 16(4), 242–252.

Rozemeijer, N., & van der Jagt, C. (2000). Community-based natural resources management (CBNRM) in Botswana: How community-based is CBNRM in Botswana. *Empowering Communities to Manage Natural Resources: Case Studies from Southern Africa. SADC Wildlife Sector Technical Co-ordination Unit, Lilongwe*.

Samuelson, P. A. (1947). Chapter VIII welfare economics. In *Foundations of economic analysis* (pp. 203–253). USA: Lancaster Press, Harvard Economic Studies.

Schumpeter, J. A. (2017). *Theory of economic development*. Routledge.

Sen, A. (1974). Informational bases of alternative welfare approaches: Aggregation of income distribution. *Journal of Public Economics, 3*, 387–403.

Sen, A. (1993). Capability and wellbeing. In M. Nussbaum & A. K. Sen (Eds.), *The quality of life* (pp. 9–30). Oxford: Clarendon Press.

Sen, A. (1999). *Development as freedom*. Oxford University Press, 366.

Silva, J., & Masimone, A. (2013). Conservation-based rural development in Namibia: A mixed-methods assessment of economic benefits. *The Journal of Environment and Development, 22*(1), 25–50.

Singleton, S. (2000). Co-operation or capture? The paradox of co-management and community participation in natural resource management and environmental policy-making. *Environmental Politics, 9*(2), 1–21.

Smith, D. E. (1998). *Indigenous land use agreements: The opportunities, challenges and policy implications of the amended Native Title Act*. Centre for Aboriginal Economic Policy Research.

Smyth, D. (2015). Indigenous Protected Areas and ICCAS: Commonalities, contrasts, and confusions. *Parks, 21*(2), 73–84.

Srinivasan, S. (2007). No democracy without justice: Political freedom in Amartya Sen's capability approach. *Journal of Human Development, 8*, 3.

Stone, M. T., & Nyaupane, G. (2014). Rethinking community in community-based natural resource management. *Community Development, 45*(1), 17–31.

Turnbull, W. (2010). Working on country evaluation report. Prepared for the Australian Department of the Environment, Water, Heritage and the Arts.

Walalakoo Aboriginal Corporation RNTBC. (2016). Walalakoo Healthy Country Plan 2017–2027.

Wasylenko, M. (1999). Taxation and economic development: The state of the economic literature. *Public Administration and Public Policy, 72*, 309–328.

Waylen, K. A., Fischer, A., McGowan, P. J., Thirgood, S. J., & Milner-Gulland, E. J. (2010). Effect of Local Cultural Context on the Success of Community-Based Conservation Interventions. *Conserv. Biol., 24*(4), 1119–1129.

Waylen, K. A., Fischer, A., McGowan, P. J., & Milner-Gulland, E. J. (2013). Deconstructing community for conservation: why simple assumptions are not sufficient. *Hum. Ecol., 41*(4), 575–585.

Yanunijarra Aboriginal Corporation (2012). The Ngurrarawarnti Wulyu Martarnupurru 2012–2022 — Ngurrara Healthy Country Plan 2012–2022.

Young, M. N., Peng, M. W., Ahlstrom, D., Bruton, G. D., & Jiang, Y. (2008). Corporate governance in emerging economies: A review of the principal–principal perspective. *Journal of Management Studies, 45*(1), 196–220.