



# A practical tool to enable Indigenous enterprise planning and development grounded in culture

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## Abstract

Globally, Indigenous people seek to develop sustainable livelihood options that enable them to practice their culture, look after their traditional estates and generate economic development outcomes for their wider community. Enterprise development can and may provide one such pathway. However, challenges can arise with regard to reconciling the core drivers of ‘economic development’ with aspirations to practice and preserve culture. Current enterprise development approaches and models do not always suit Indigenous contexts. In this paper, we present a practical tool to enable Indigenous leaders, their partners, and others, to consider enterprise development options grounded in culture that may generate multiple benefits including economic outcomes. Our tool combines critical review of alternative development models, with empirical research to outline a set of foundational principles, building blocks and potential enterprise development options. We apply the practical tool to a case study of a nascent enterprise from the northern Australia Indigenous-led bush products sector. The case study illustrates how enterprise development planning is integral and discussions should consider how to enable cultural governance, protection of Indigenous cultural and intellectual property, potential benefits and sharing, access to resources, as well as the ‘building blocks’ for enterprise development and consideration of different enterprise approaches. The practical tool aims to ensure development pathways build on local economies and ecologies, do not compromise culture and recognise the influence of extra-local political economies on lived experiences and outcomes.

**Keywords** Indigenous-led bush products industry · Northern Australia · Diverse economies · Hybrid economies · Cultural and conservation economies · Post-development

## Introduction

Culture has been conceptualised in dominant development discourse as one factor to explain why some Indigenous people face social and economic disadvantage as compared with some non-Indigenous people (e.g. Bargh 2011a). At the turn of the century, post-development practitioners and scholars, described as “observers ‘on the ground’ of the failures of the one-size-fits-all model of development” (Gibson-Graham 2005, p. 4) began to question this discourse and to consider alternative discourses (e.g. Escobar 1995; Gibson-Graham 2005). Their critique joined the voices of post-colonial scholars to highlight the origins and evolution of the dominant development narrative (e.g. Said 1979; Kothari 1988; Bhabha 1994; Sylvester 1999). For example, they posited how Rostow’s (1960) ‘developmental view’ of humanity—that articulated how societies and people pass through five distinct stages of ‘development’—consigned Indigenous people and people from countries other than the

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imperial ‘West’ to exist at a less advanced stage of a continuum (e.g. Hindess 2007; Bargh 2011a). They argued that this continuum perpetuated post-World War II cultural imperialism with categorizations of ‘underdeveloped’, ‘developing’ and ‘developed’ whereby ‘the west’ was seen as all that was positive and advanced versus ‘the rest’ that was considered as undeveloped and backward (see Said 1979; Sachs 1992; Escobar 1995; Gibson-Graham 2005). Related to this discourse of ‘progress’ was the notion of superior and inferior knowledge (Gibson-Graham 2005, p. 5), economies and economic development (e.g. Santos de Sousa 2004), people and cultures. Such a discourse resulted in the production of what some articulate as monocultures of the mind (Shiva 1993), of knowledge, and of economic productivity (Santos de Sousa 2004). Put simply, it was used to inform government and international policy including, for example via the creation of a ‘third world’ that was deemed as needing ‘international development intervention’. Post-development scholars argued that this discursive creation and strategy enabled the justification to expand the ‘first world’s’ mode of governmentality into the so-call ‘third world’ (Escobar 1995; Gibson-Graham 2005). It ignored the diversity and multiplicity of social practices, knowledges, social relationships, economies and places of which that world is *actually* comprised (e.g. Santos de Sousa 2004).

Spencer et al. (2016) argue that echoes of this development discourse persist in contemporary times, including in approaches that aim to overcome persistent Indigenous disadvantage via ‘economic mainstreaming’. In current day Australia, for example, this ‘economic mainstreaming’ has sometimes suggested that Indigenous Australians could move from their communities in remote and regional Australia (that may have little or no existing employment opportunities) to regional centres where they may be more likely to obtain employment (Spencer et al. 2016). Other scholars argue how such an approach perpetuates unhelpful dichotomies (e.g. economic development/ Indigenous culture) and fails to recognise the strength and importance of Indigenous worldviews, cultures and heritage to the general health and wellbeing of Indigenous people (cf. Hill et al. 2008; Jarvis et al. 2018, 2021). Some argue that this narrative renders invisible the economic, social, cultural and environmental value of the Indigenous *customary* economy (Banerjee and Tedmanson 2010), undermines the potential for local innovation and enterprise development and further enforces the dichotomy of self-determination/assimilation (Dockery 2010).

To confront such discourses, related narratives and dichotomies, scholars and Indigenous leaders assert that Indigenous knowledge, culture, and heritage should be viewed as part of the solution to any Indigenous economic disadvantage, rather than the cause (e.g. Hill et al. 2006; Bodle et al. 2018; Maclean et al. 2019). Others contend that

a shift in discourse from one of ‘remote disadvantage’ to one of ‘remote advantage’ is supportive of Indigenous peoples living within remote communities (McRae-Williams and Guenther 2014; Lovell et al. 2015). This discourse opens the space to consider alternative approaches and models of economic development (Brueckner et al. 2014). It may enable a better understanding of how the Indigenous political economy—the power relations that exist between Indigenous communities, decision makers, institutions and governance arrangements—influences local economies (Banerjee and Tedmanson 2010). It brings focus to diverse Indigenous and community economies (e.g. Altman 2006; Bargh 2011b; Bargh et al. 2014; Barr et al. 2018; Amoamo et al. 2018a; Gibson et al. 2018; Ruwhiu et al. 2022).

This paper shares research, conducted in partnership with an Indigenous organisation, to investigate practical pathways for culturally grounded economic development. First, we critically review alternative discourses and models of economy to consider how they regard culture as a key driver of economic development. Next, we present our empirical research conducted with Giringun Nursery, a nascent Indigenous bush products enterprise in northern Australia. It is in transition to become a viable business that can generate multiple benefits. We draw on empirical research to develop a practical tool for Indigenous leaders, their partners, and others, to reconcile culture with economic development. The paper ends with a discussion of the implications of this tool for Indigenous leaders and others.

## Alternative discourses and models of economic development

Post-development scholars argue for representations of ‘economy’ as diverse rather than as a ‘one-size-fits-all’ model (e.g. McGregor 2009; Gibson-Graham 2008, 2014). They offer an ‘ontology of economic difference’ via alternative conceptualisations and models of ‘economy’ and ‘economic development’ (e.g. Gibson-Graham 2008). The diverse economies approach, for example, reframes ‘economy’ to:

“...allow for a much wider range of social relations to be seen to bear on economic practices including, to name just some, trust, care, sharing, reciprocity, cooperation, coercion, bondage, thrift, guilt, love, equity, self-exploitation, solidarity, distributive justice, stewardship, spiritual connection, and environmental and social justice” (Gibson-Graham 2014, p. S147).

This alternative conceptualisation provides a lens through which to understand the various relations that influence the economic practices inherent to local economies. For local Indigenous economies, these relations

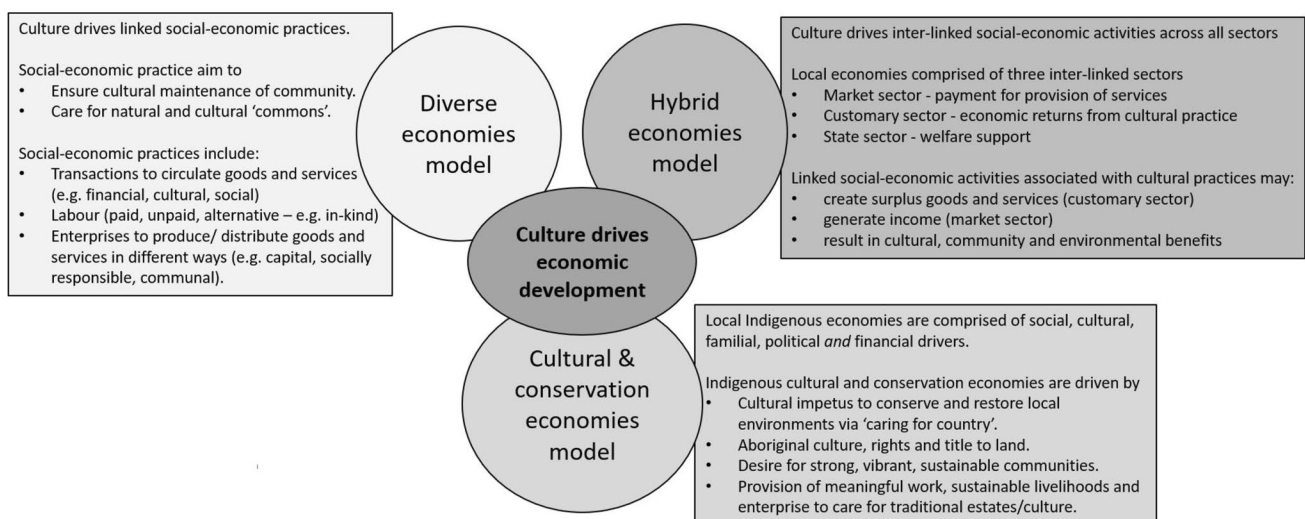
include cultural practices, cross-generational knowledge sharing, spiritual connection to country, imperatives to care for country and co-benefits. We acknowledge the work of other scholars and practitioners in this field (e.g. Lavergne and Saxby 2001; Armstrong et al. 2005; Bargh 2011b; Amoamo et al. 2018b; Barr et al. 2018) yet focus our analysis on the diverse community economies framework, the hybrid economy, and the cultural and conservation economies model, to illuminate how each alternative conceptualisation of ‘economy’ regards culture as a driver of (Indigenous) economic development (summarised visually in Fig. 1). We understand ‘culture’ to include spiritual, social and environmental impetus as well as practices used to manage and connect with traditional estates (Gibson-Graham 2005, 2008; Hill et al. 2008; Kimberley Land Council 2017). This may include customary practices that create ‘goods and services’ (Altman 2001, 2005, 2006; Gibson-Graham 2005, 2008) such as edible, botanical, and other ‘bush products’ created for local, national, and international markets.

### Diverse and community economies framework

The ‘diverse economies framework’ (Gibson-Graham 2005) is a pertinent example of post-development scholarship for economic difference. This framework creates ways to perform new economic worlds that move beyond the aforementioned dichotomies to reflect the reality of community economies (Gibson et al. 2018). Gibson-Graham (2005) used this framework to better understand community economies in parts of Indonesia and revealed them to be comprised of a

“thin veneer of capitalist economic activity underlain by a thick mesh of traditional practices and relationships of gifting, sharing, borrowing, volunteering, and reciprocated individual and collective work. A network of bonding and bridging relationships creates complex interdependencies” (2005, p. 16).

Figure 1 provides a visual summary of how the diverse economies model regards culture as a key driver of linked social-economic practices according to Gibson-Graham (2005, 2008). At the heart of the diverse economies framework are social relations that inform, and influence performance of economic practices that sustain lives, maintain wellbeing, distribute surplus to ensure the material and cultural maintenance of community, and to care for the natural and cultural ‘commons’ via living with more than human interdependence (Gibson-Graham 2005; Gibson et al. 2018). Inter-linked social relations and economic practices are comprised of three kinds of activities: transactions, labour, and enterprises (see Gibson-Graham 2008). Transactions circulate goods and services and may include those derived from the market, alternative market (e.g. local trading systems, barter, and ethical ‘fair trade’ markets), and non-market (e.g. household flows, gift giving, hunting, fishing, and gathering). Labour may include wages, forms of alternative payments (e.g. co-operative, in-kind, and work for welfare) and unpaid labour (e.g. housework, family care, and slave labour). Enterprises produce, appropriate, and distribute surplus in different ways, including capitalist means of generating and distributing surplus, alternative capitalist approaches (e.g. green capitalism, social responsibility, and non-profit) and/or non-capitalist (e.g. communal and independent). Gibson-Graham (2008) explains how the framework could



**Fig. 1** Culture drives economic development in local Indigenous economies (derived from Altman 2001, 2005, 2006; Gibson-Graham 2005, 2008; Hill et al. 2008; Kimberley Land Council 2017; Gibson et al. 2018)

include many more economic activities and movements including, for example, the “plethora of hidden and alternative economic activities that contribute to social wellbeing and environmental regeneration” (p. 618). Later work articulates how the practices and connections to enable the ethical concerns of community economies (in Monsoon Asia) also reveal the creative negotiations that occur within communities, some of which is in response to external forces of mainstream development agents and projects, and thus, may offer different post-development pathways (Gibson et al. 2018).

### Hybrid economy model

Complementary work in Australia, specific to Indigenous economies, includes the hybrid economy model (e.g. Altman 2001, 2005, 2006). Altman draws on extensive empirical work in central Australia (e.g. 2001, 2006) to illuminate how local economies in remote Indigenous Australia are best understood as ‘hybrid’ in nature. These hybrid local economies are likely comprised of the private market sector (e.g. income generated from payment for (environmental, education, health) service provision), state sector support (e.g. income support as part of the welfare economy), and the non-market customary sector (e.g. economic returns from fishing, gathering, and hunting). The hybrid economy model highlights the important linkages between the three sectors. Figure 1 provides a visual summary of how culture is considered to drive these interlinked social-economic activities across the three sectors. A pertinent example focussed on community bush product economies would note the interlinked social and economic activities associated with the non-market customary economy (e.g. wild harvest of bush products) and the private market economy (e.g. income generated from sale of bush products) may provide income but also meaning (c.f. Yates 2009) in the form of knowledge sharing, being on country and caring for traditional estates, and will likely also generate diverse benefits (c.f. Burgess et al. 2005; Jarvis et al. 2021) to people, their country and the wider society.

### Cultural and conservation economies model

The cultural and conservation economies model (e.g. Hill et al. 2006, 2008) is another model that can enable an alternative conceptualisation of Indigenous economies. The model originated in Canada and has been adapted to suit other contexts, including Australia. For example, it has been applied and further developed by the peak Indigenous body in the Kimberley region of north-west Australia, the Kimberley Land Council Cultural Enterprise Hub, to support native title corporations and Indigenous ranger teams to develop cultural and environmental enterprises on their traditional country (see Kimberley Land Council 2017). Core to this

model is the reality that many Indigenous people wish to develop meaningful employment options on their traditional estates. The goal of such employment is to enable their cultural responsibility to their traditional country, their cultural practices in a way that can also generate financial income (e.g. Hill et al. 2006, 2008; Hill and Woodward 2017; Kimberley Land Council 2017, see Fig. 1 for a visual representation of this information). This model illuminates how local Indigenous economies are comprised of social, cultural, familial (including kinship), political and financial drivers that are inherently tied to specific geographic places. In Indigenous Australia, for example, the cultural and conservation economy includes Aboriginal culture, rights, and title to land; a focus to build and support strong, vibrant, and sustainable communities; the provision of meaningful work, good livelihoods, and sustainable enterprise; and a cultural impetus to conserve and restore the environment via Aboriginal caring for country (Hill et al. 2008).

These alternative discourses and models of economic development, derived from post-development scholarship, open the space to consider alternative approaches development. However, they do not offer a pathway or tool that could be used to support Indigenous, or community-led enterprise development based on the concept of ‘culture-as-enabler’. The remainder of this paper presents empirical research conducted in partnership with Girringun Nursery, a nascent Indigenous bush products enterprise in northern Australia. We present a practical tool to enable Indigenous enterprise planning and development grounded in culture. Our tool draws on empirical research to outline a set of foundational principles, building blocks and potential enterprise development options. We define an ‘enterprise development approach’ as the steps that are necessary for the development of an enterprise with a particular focus and ‘enterprise development model’ as a visual representation of that approach.

### Research methods and context

We draw on research conducted (2019–2020) in partnership with Girringun Aboriginal Corporation (Girringun) located in north-east Australia to both inform and test this practical tool. This research used qualitative methods and participatory research approaches to document the challenges, future aspirations and potential enterprise development approaches that might support enable Girringun to transition their struggling biodiversity and native plant nursery (the Girringun Nursery) into a profitable on-country bush products enterprise. A participatory action research approach (e.g. Zurba et al. 2019) was used to support the active involvement of all project partners in the design of research proposal and methodology, the data collection and research reporting. This ensured the research was conducted in a culturally appropriate way and generated



immediate and longer term benefits for the wider community (Maclean et al. 2022). For example, the first three authors of this paper worked in partnership to determine the research focus, developed the funding application, wrote the research ethics application, and decided on appropriate research methodology. Giringun managed a project budget to ensure that all participants were paid for their time. The research report included recommendations to support future development of the Giringun Nursery.

Two sets of semi-structured interviews, a group discussion and a country-visit were conducted to collect qualitative data. The first set of interviews and a group discussion ( $n=11$ , August 2019) were conducted in person with members of the Giringun community (including Nursery staff) who could speak about the history, successes, benefits, challenges, and future aspirations for the development of the biodiversity and native plant nursery. We refer to the interviews as ‘Giringun’ with a number that relates to the order of the interview or with ‘group discussion’ as appropriate. A second set of interviews ( $n=3$ , May 2020) was conducted via telephone/weblink (due to travel restrictions of CV-19) with non-indigenous representatives from two Indigenous bush product enterprises (referenced as Enterprises 1 and 2 in the text) and a non-indigenous ‘bush foods business’ (referenced as Business 1) from northern Australia. The aim of these interviews was to understand their enterprise development approaches and to use insights to consider possible future pathways for the Giringun Nursery. We refer to this set of interviews as the Enterprise/Business interviews. The research, approved by CSIRO Social and Human Research Ethics committee (095/19), used a free and prior informed consent process with all participants. Most interviews were recorded using a digital voice recorder and later transcribed, otherwise detailed notes were taken by hand in a notebook. The lead author used NVivo to code the interview data and analysed it by emergent themes.

In the next section, we locate our research in the Indigenous-led bush product sector in northern Australia and present a case study of the Giringun Nursery. The case study illustrates the many services and benefits it provides to the wider community. It articulates the challenges faced to transition from a Nursery focussed on culture to a viable enterprise. The case study outlines what the research participants considered as the steps needed to transition the nursery into a viable bush products enterprise. We end the case study with an exploration into alternative enterprise development models used by three other enterprises from the Indigenous (and non-indigenous) bush products sector.

## Indigenous-led bush product sector in northern Australia

The evolving Indigenous-led bush products sector in northern Australia is comprised of a diverse range of Indigenous organisations and enterprises (see Woodward et al. 2019; Jarvis et al. 2021). It includes Indigenous organisations and enterprises involved in the wild harvest and, or cultivation (including enrichment planting) of selected native Australian plants. Some of these organisations and enterprises may harvest and sell ‘raw’ bush products such as seeds, fruit, native plants, cut native flowers for example the Maningrida plant Nursery located in coastal north Australia (e.g. BAC 2020); and the Giringun biodiversity and native plant nursery, north-east Australia (see Giringun 2021a). Other enterprises may drive an entire supply chain from harvest, processing, product design and development, marketing and selling to local, regional, national, and international markets. For example, bush foods including the Gubinge (Kakadu Plum) powder and wafers developed by Kimberley Wild Gubinge, north-west Australia (KWG 2020); and the health and beauty products derived from native plant botanicals created by Bush Medijina, Groote Eylandt an island located off the coast of north Australia (see Bush Medijina 2018, 2020). Some enterprises operate as part of a co-operative, for example the Northern Australia Aboriginal Kakadu Plum Alliance that assists its members in industry leadership, ethical supply and to have greater influence and control in all aspects of their enterprises (see NAAKPA, nd). All enterprises draw on locally specific cultural knowledge of the health and medicinal benefits of specific native plants to develop their products. They may operate with the skills of their own community members, and, or draw on the skills and expertise of others. They may focus on creating products intended for use solely by their own communities or also for Australian and even international markets. Most enterprises aim to generate multiple benefits for their community (Jarvis et al. 2021). Importantly, Jarvis et al. (2021) highlight the potential trade-offs and/or challenges faced by Indigenous people involved in bush product enterprises, whereby the potential benefits are traded-off against a loss of benefit in another dimension. For example, the potential trade-off between social and cultural motivations and related benefits (e.g. health and wellbeing of community, culture, country) with financial motivations and related benefits that could result in the unwanted commodification of culture for financial outcomes (Yates 2009; MARG et al. 2011; Walsh and Douglas 2011; White 2012; Lee 2012; Fleming et al. 2015).

## Case study: the Girringun Nursery

The Girringun (biodiversity and native plant) Nursery is a nascent enterprise from the Indigenous-led bush products sector in northern Australia. It began in 2012 when the Girringun Aboriginal Corporation received 6 years of funding from the then Australian Government Biodiversity Fund that provided grants to land managers for on-ground works aimed at maintaining “ecosystem function and increase ecosystem resilience to climate change; and increase and improve the management of biodiverse carbon stores across the country” (ANAO 2014, p. 1). Girringun is the representative incorporated body of nine Aboriginal Traditional Owner groups whose country is in the southern part of the Wet Tropics region in north-eastern Australia (see Fig. 2). The Girringun Nursery is one of many programs developed and run by Girringun to provide:

“...leadership, direction and assistance in the provision of sustainable outcomes for the improvement and positive development of the social, cultural, spiritual, environmental and economic well-being of Aboriginal Traditional Owners and community members of Girringun for the benefit of the region” (Girringun 2021b).

### Biocultural services, benefits, and related challenges

At the time of the research (2019–2020), the Girringun Nursery was not profitable. However, members of the Girringun ‘community of interest’ (e.g. Girringun Board, Biodiversity Unit, and wider community) were keen to see it prosper and continue to enable the multiple benefits it provided to the wider community. It was described by research participants as the first and only Indigenous run ‘Bush Tucker’ nursery in the State of Queensland. Within its first 2 years of operating, the staff ( $n=3$ ) were growing 70 native species from seeds collected in the region (including rainforest, high altitude forest, woodland, wetlands, and coastal lands). Although the original aim of the Nursery staff was to grow native plants for revegetation and rehabilitation on Girringun traditional territories (including areas with native title, private, council and school land, and the national park estate), the Nursery has delivered biocultural services, generated multiple benefits, as well as challenges, for the wider Girringun community.

The Nursery was described as a ‘holding place’ for culture and knowledge, and the staff were described as the ‘knowledge holders’ who actively *preserve* culture by sharing their knowledge of bush tucker plants, seasonal indicators, and important cultural stories. They were noted to

provide services to enable others to actively *practice* culture, including support for the Girringun and National Park Rangers, native title holders, Indigenous and non-Indigenous farmers and schools with seed collection, propagation, and revegetation work. The Nursery staff themselves articulated the multiple benefits they accrued from working in the Nursery, on their traditional country, and with the wider community, including acquisition of new skills and knowledge including experimentation with plant growing and culturally appropriate ‘customer service’. The main challenge faced by the Nursery staff and Girringun, was due to the need to transition the Nursery from a government funded project aimed at providing biocultural services (e.g. knowledge sharing) and benefits (e.g. revegetation of degraded land for biodiversity conservation) into a financially viable on-country bush products enterprise. The transition period placed unrealistic expectations on the Nursery staff who did not have the skills, nor interest, to operate a commercial business, nor the support from the wider Girringun community to be actively involved in business development discussions. Research participants eloquently expressed the *challenge of reconciling culture with business* and related tensions, in the following ways:

“How do you enable economic development that supports culture?” (Girringun 9)

“It’s hard to change something that was based on culture into something to make money” (Girringun Group Discussion), and

“The challenge of bringing together commercial focus with culture is a really good challenge to have!” (Girringun 3)

### Development aspirations for the Girringun Nursery

All participants articulated their ideas and aspirations for the future development of the Girringun Nursery. Several participants spoke about how Girringun should focus on developing their market niche for the bush products market. Suggestions included planting and growing bush tucker and other culturally significant native plants on a large scale on a nearby block of land owned by Girringun (the Block) to generate multiple benefits and opportunities including materials for the Girringun Artists’ basket weaving. Some participants raised ideas to explore the development of medicinal products drawing on cultural knowledge of the health properties of locally endemic native plants, as this individual articulated:

“there could be something, a medicine within our own rainforest, because [we have] walked through this rainforest [and we know what’s there... it] could be something that’s of benefit to the whole world, not just to

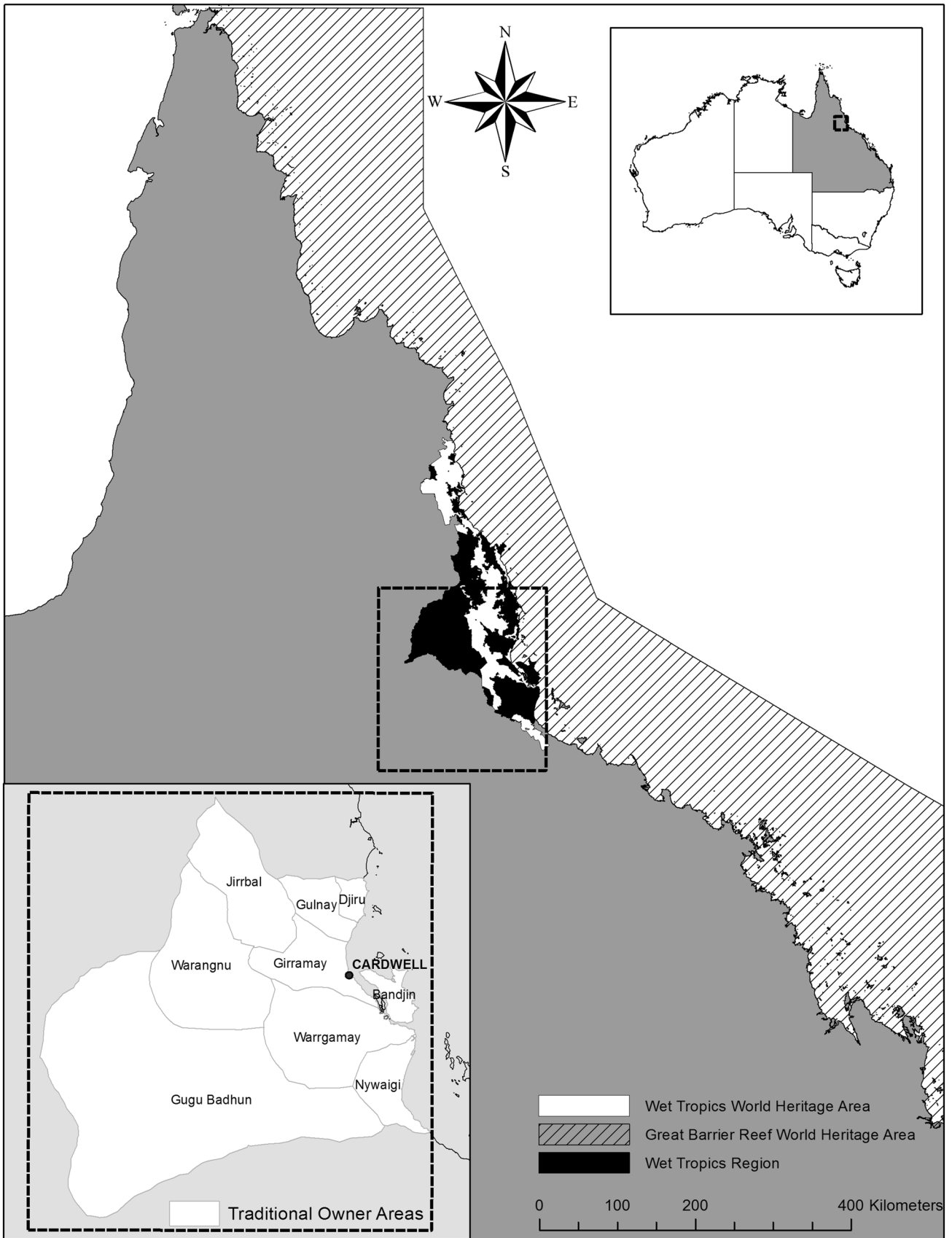


Fig. 2 Giringun Aboriginal Corporation language groups and approximate country locations. Boundaries are indicative only (redrawn from Maclean et al. 2013)

us, not just to Australians but for the whole world. Imagine that!” (Girringun 10).

Participants highlighted how the Nursery could be reinvigorated by growing large quantities of native plant stock for revegetation contracts, however, experience has shown the challenges in securing such contracts and having the lead time to develop up the necessary stock. Another idea to support the re-ignition of the Nursery was to diversify the kinds of plants grown to suit market demand to also include exotic species. However, given experience, Girringun would need to be mindful of the tension between the two, as this participant reasoned: “[we *could*] focus on culture *and* production. [...] but would that result in a cultural clash?” (Girringun 9).

Other participants discussed options to *extend* on the Nursery, including the development of a tourism venture that could draw on the existing Girringun programs (e.g. the Nursery, Indigenous Rangers, and Girringun Arts) to create opportunities for a bush tucker café/restaurant, support to make and sell bush products, cultural awareness training and bush survival training. One person suggested combining aspects of each of these programs into an on-country-experience for tourists, she enthused:

“The Girringun Nursery, and the Girringun Block would be a great place to hold arts workshops, for example weaving workshops, tourists could look at the [bush tucker] plants, [the Nursery staff could] tell origin stories, then [the tourists could] do some weaving with the Girringun Artists. School students could then cater for the workshops, using bush foods” (Girringun 7).

Another participant suggested how these new programs could be consolidated as part of a ‘Girringun bush traders co-operative’ that could include a bush tucker café, and shop selling bush foods and bush botanical-based products (e.g. health and beauty products, soaps, candles) (see Aboriginal Bush Traders 2024).

### A process for improved business development planning

Participants also discussed possible solutions to the challenges already faced by Girringun in attempting to transition the Nursery from something that provides biocultural services (e.g. knowledge sharing) and benefits to the wider community and country, into a financially viable on-country bush products enterprise. The overarching solution was a call for improved business development planning. Participants identified how such a planning process would need to include the following. First, a collaborative planning *process* that will enable everyone to “hear what people have to say, sit down and prioritise. [We need a] collective decision

on how to go forward” (Girringun Group Discussion) and to secure the ‘buy-in’ from all the Girringun member groups. One participant highlighted the need for a ‘business outlook’:

“[it’s] not been all rosy, but with anything if you want to go into business, you need to do your homework, and [with regards to the Nursery, you need to] target the species that you want to sell, to be successful in nursery regeneration. [The Nursery] needs a business outlook and someone chasing those opportunities. [You’ve] gotta be proactive all the time in the nursery. If you secure a contract, that’s not the end game, while that contract is going, must look for next opportunity” (Girringun 3)

Importantly, several interview participants articulated that any enterprise development plan would need to account for processes to protect Indigenous Cultural and Intellectual Property (ICIP), following appropriate cultural protocols and related benefit sharing. Next, participants also highlighted the need to identify a *market niche*, a *competitive edge*, and a *brand*. One participant enthused about the value of storytelling as central to their brand:

“...this nursery is owned and operated by local Aboriginal people; plants are propagated by them and they’re able to tell you the story behind those plants [...we’ve got] to tell that story better. Everyone loves a good story!” (Girringun 5).

Participants also discussed how Girringun and its members would need to identify necessary *skills*, *external support* and *partnerships options* to enable future enterprise development. However, as noted by one participant, Girringun would need to develop appropriate processes and structure to protect ICIP, as

“We’re sick and tired of giving non-Indigenous people our stuff, they sell it like to the pharmaceutical companies; they make big money [but] do the Indigenous people get any of that money? Not a red cent!” (Girringun 10).

Finally, they discussed the usefulness of identifying correct and appropriate *enterprise development approaches* and questioned whether “...it is better to have a commercial enterprise that is separate from the not-for-profit Girringun Nursery, [so that...] the commercial enterprise takes on all the risk...” (Girringun Group Discussion).

### Alternative enterprise development models used in the Indigenous bush products sector

Representatives (denoted as Enterprise 1 and 2) from two Indigenous bush product enterprises in northern Australia



who were interviewed for this study highlighted the value of the social enterprise model. This model was described as useful to develop an enterprise that does not compromise culture and cultural practices. Social enterprises seek to generate profit to create social impact, and profits are reinvested for future benefit of whole community. This *might* include a single Indigenous enterprise owning the entire supply chain. Despite the vastly different origins, governance arrangements and circumstances of these two enterprises, there are some interesting commonalities. Both are run by women to empower women. Each provides a safe ‘trauma-free’ space and a place for women to connect. They both enable women to apply their knowledge of native flora and cultural practices to develop medicinal plant-based health and skin care products for local and/or national markets, or as was the case for Enterprise 2, for the local Aboriginal market only. They both create real and meaningful jobs on country for the women that supports them to draw on culture and knowledge to generate financial income. Further, as per the social enterprise model, both enterprises enable the women to enhance the cultural and economic health and wellbeing of their community. The women do this using their income to look after their family, as positive role models for the wider community and by using surplus income to generate social outcomes for their community (e.g. taking children and young people on visits on their traditional estate and country). Finally, given the focus of the social enterprises, remaining ‘profits’ are also reinvested into the enterprise for future benefit of the whole community (see Fig. 2, Part 3.A).

The Representative from Enterprise 1 also discussed a complementary enterprise model that they are considering using to further support their bush product enterprise. They acknowledged that the current stability of the women’s bush products enterprise is due to core funding from mining royalties generated by a local mine that is soon to close. To sustain the future of the enterprise, the Representative works with the women and others to identify an alternative enterprise development model. Noting that if the bush products enterprise was to become a business, there would have to be a shift in focus from health, wellbeing, and capacity building (social benefits and outcomes) to simply profit making. As such, they are considering an alternative ‘Robin Hood’ model, that would include a commercial operation that is part of the overall enterprise development model. The commercial side would be for-profit and direct profits back to the not-for-profit organisation to continue supporting the women and their current vision (Fig. 4, Part 3.B).

The Representative from Enterprise 1 also highlighted the important role of partnerships with sponsors and business development mentors for enterprise setup and success. She explained this in the following words:

“I don’t believe in necessarily saying, ‘you should be able to do everything’. [Name of enterprise] is Indigenous led but they certainly don’t have to do everything [themselves] because that’s not a good business model” (Enterprise 1).

An example of one such partnership arrangement (Fig. 2, Part 3.C) that could be an option for nascent Indigenous Enterprises from far north Queensland was presented and explained by a Representative from Business 1, a non-indigenous bush foods business. Business 1 is a horticulture business that propagates, grows, and selects native bush food plants for the purposes of local ecological regeneration. It also produces raw and processed bush food products for local, national, and international markets. As the Representative explained, Business 1 is also keen to support other growers, Indigenous and non-indigenous, in efforts for ecological regeneration and production of bush foods. Further, they have a stated vision to be an ‘enabling partner’ for Indigenous groups interested in starting or consolidating their own bush products enterprise. To this end, they regard themselves as part of a “knowledge-sharing network in the development of the Australian commercial bush foods sector” (Business 1). In addition to sharing their horticultural knowledge, they support other grows via the provision (at a cost) of 4 species of native bush food plants, propagated, selected, and grown specifically by the Business to suit local conditions and maximise production. Further, as the Representative explained, they also extend their support to nascent enterprises by offering knowledge about business process, operation, management, marketing, and sales, including the opportunity to be introduced to their wider national and international networks in the bush product market.

### **A practical tool to enable Indigenous enterprise planning and development that is grounded in culture**

Analysing how Indigenous groups in northern Australia create enterprises that draw on Indigenous knowledge of native Australian flora, Indigenous governance approaches and aspirations for sustainable livelihoods (Woodward et al. 2019; Maclean et al. 2019, 2022; Jarvis et al. 2021; Gorman et al. 2023) can provide lessons that might be applied elsewhere. The tool is informed by critical review of alternative development models, existing research into the Indigenous bush products sector (Maclean et al. 2019) and the empirical work presented in this paper. Figure 3 provides a visual of the data used to develop this tool. It aims to enable planning and development for Indigenous bush product enterprises grounded in culture. It recognises culture as a key driver

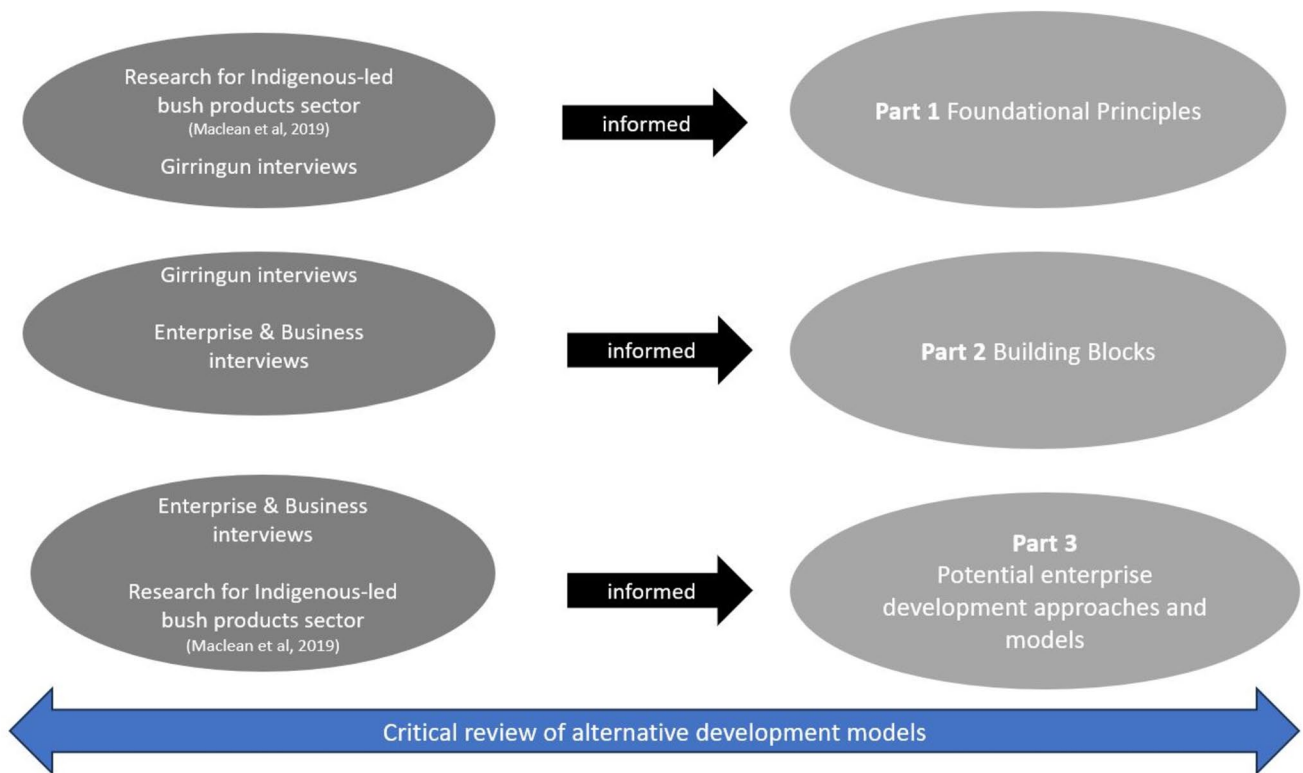


Fig. 3 The data used to inform development of the practical tool to focus planning for Indigenous enterprise development grounded in culture

**Part 1: Foundational Principles**

- Indigenous Cultural and Intellectual Property and Innovation (develop mechanisms to protect ICIP & enable benefit sharing)
- Indigenous leadership guided by cultural governance (develop governance structures & processes)
- Co-benefits (e.g. identify co-benefits - social, cultural, health & wellbeing, political self-determination, economic, caring for country - & develop measures of success)
- Access to Traditional territories and resources (E.g. for cultivation and/or wild harvest; seek permits & partnerships with holder of the Land title: Indigenous, Govt., farmers)

**Part 2: Building blocks**



**Part 3: Potential enterprise development approaches and models**

A: Social enterprise: single Indigenous enterprise owns entire supply chain



B: Robin Hood enterprise - Indigenous social enterprise & Indigenous for-profit enterprise



C: Partnership model - Indigenous social enterprise & Indigenous or non-indigenous for-profit partner



Fig. 4 A practical tool to focus planning for Indigenous enterprise development grounded in culture

of linked social-economic practices (Gibson-Graham 2005, 2008); acknowledges how enterprises provide the means to fulfil place-based cultural responsibilities, obligations to country and community (Altman 2001, 2005, 2006; Hill et al. 2008; Hill and Woodward 2017; Kimberley Land Council 2017) and generate financial outcomes (Maclean et al. 2019, 2020, 2023).

The tool, presented visually in Fig. 4, comprises a set of foundational principles, building blocks and potential enterprise development approaches and models. Taken together, it is intended for use by Indigenous leaders, their partners and others to aid in planning for enterprise development. It aims to provide a comprehensive overview of structures, processes, and approaches to support enterprise development based on culture and cultural integrity. It is a tool that can move beyond the narrative of ‘culture as dis-enabler’ to ‘culture as enabler’ of economic development.

The Foundational Principles (Fig. 4, Part 1) aim to protect ICIP and innovation; enable Indigenous leadership guided by cultural governance; identify the co-benefits that can be derived from enterprise development; and the development of arrangements (e.g. partnerships, agreements) to enable access to traditional estates and resources (Maclean et al. 2019). The set of Building Blocks (Fig. 4, Part 2) includes activities to support enterprise development planning; agreement making; enterprise setup; product ideation, development, marketing, and sales (Maclean et al. 2020). Activities may occur con-currently and may require ongoing discussion and negotiation. Figure 4, Part 3 provides some potential enterprise development approaches and models that recognise future enterprises as part of specific Indigenous political economies and ecologies (Maclean et al. 2020). The social enterprise approach (Fig. 4, Part 3A) seeks to generate profit to create social impact, and profits are reinvested for future benefit of whole community. Social enterprises aim to develop social innovations to address particular social challenges; and ultimately promote empowerment, emancipation, and value creation (as opposed to value appropriation) (Vázquez-Maguirre 2020).

The ‘Robinhood’ approach (Fig. 4, Part 3B), coined by the women from Enterprise 1 above, includes two parts. First, a social enterprise run by and for the Indigenous community that manages the first part of the value chain (e.g. cultivation, harvest, process and manufacture of the product) focussed delivering benefits for the wider community. Next, an Indigenous owned and run ‘for-profit enterprise’ that manages the supply part of the value chain (e.g. marketing, sales, distribution, retail), that is focussed on generation of profit. The ‘Robinhood’ notion is that the for-profit business then reinvests funds into the social enterprise, thus enabling sustainable development for multiple benefits.

The ‘partnership’ approach (Fig. 4, Part 3C), named by Business 1 above, includes a partnership between an

Indigenous social enterprise and an Indigenous *or* non-Indigenous for-profit partner. The Indigenous social enterprise aims to generate benefits for the wider community via cultivation, harvest and processing of bush products. They sell their product to the for-profit enterprise and reinvest funds to the social enterprise. The for-profit enterprise provides business development mentoring and expertise to the Indigenous social enterprise, as well as access to national and international networks for future business development opportunities.

The focus of each of these enterprise development approaches is to recognise that poverty alleviation is about more than simple increases in income but is also determined by how production is undertaken (and by whom), and whether these modes of production deliver benefits (and what kind of benefits) to the Aboriginal people involved (Yates 2009). Such approaches and models can be based on the celebration and practice of the local customary economy, Indigenous world views and place-based ways of life. They can recognise and support local innovation that may result from, for example, the cultural and environmental *advantages* that can be derived from living in remote and regional Indigenous communities (Lovell et al. 2015).

## The practical tool applied to the case of the Girringun Nursery

### Foundational Principles (Fig. 4, Part 1)

Indigenous Cultural and Intellectual Property (ICIP) and related innovations are likely to be used and developed in the planning and development phases and future operation of an enterprise. Thus, it would be essential for an organisation like Girringun to develop mechanisms to protect ICIP and enable benefit sharing of any future revenue to be derived from the Girringun Nursery. Noting that this may not be straight forward, and it could be a significant challenge to identify who owns the ICIP related to specific plants that may exist on the traditional estates of multiple groups (Maclean et al. 2019). Further, if the Girringun Nursery was to enter into a partnership with another Indigenous or a non-Indigenous bush products enterprise (e.g. Fig. 4, Part 3C), it would be important to be guided by cultural governance processes (structures and processes) and to identify appropriate mechanisms (to protect ICIP and for benefit sharing) if they ever decide to enter into partnership arrangements for the development of a product (e.g. Robinson 2010; Robinson and Raven 2017; Janke 2018; Janke and Sentina 2018; Robinson et al. 2018; Jarvis et al. 2021).

An enterprise that is guided by Indigenous leadership and cultural governance approaches and protocols, is likely to

generate co-benefits to those involved with the enterprise and the wider community (c.f. Maclean et al. 2018, 2023). Thus, it would be important for Giringun to consider what co-benefits it wishes to generate from the Nursery, to whom, and to develop mechanisms to measure the success of the enterprise according to such co-benefits. In the Australian bush products sector, Jarvis et al. (2021) categorise co-benefits into economic and financial benefits (e.g. provision of jobs, on the job-training, generation of income via profits); health and wellbeing benefits (e.g. being on country, increased exercise, improved diet, freedom, and independence and autonomy from government welfare support); and benefits to culture, community and country (e.g. spending time on and caring for country, cross-generational knowledge and skills sharing, environmental restoration). For Giringun, a profitable nursery would enable it to develop meaningful and sustainable employment pathways for its members (from across nine Traditional Owner groups) while supporting them to practice and strengthen their culture via stewardship of their traditional country. Importantly, many of these benefits will be derived from culture, Lore, and Indigenous knowledge. Strong leadership is needed to ensure that such benefits derived from any enterprise (including financial benefits) are appropriately managed and distributed. Failure to do so would result in division within and between communities and language groups.

Given the likely need for ongoing adaptive management and learning for enterprise success and reporting (e.g. to funders, philanthropic and impact investors) it would be important for Giringun to develop mechanisms to measure the success of the Giringun Nursery according to such co-benefits. For Giringun, and other organisations in the bush products sector, co-benefit discussions and outcomes ultimately rely on the development of the physical product. Development of ‘bush-products’ for market requires Indigenous groups to be able to access their traditional territories and resources for cultivation and, or wild harvest of ‘product’, for the life of the enterprise—from planning for collaborative (bush enterprise) projects, through to the sale of products to the market. Some groups may have recognised ownership or title of their territories, while other groups may require entering negotiated agreements or partnerships with the relevant landowners (e.g. the Indigenous entity, government agency, farmers, or another holder of the land title), and others, due to the colonial legacy of their country, may not have any means to access their traditional estates.

### Building Blocks (Fig. 4, Part 2)

The practical tool also includes a set of Building Blocks or steps to enable processes and structures to support Indigenous enterprise development that is grounded in culture. This includes sets of activities around three specific phases:

business development planning; enterprise setup; and product ideation, development, marketing, and sales (Maclean et al. 2020). As depicted in Fig. 4, these phases are not linear, may occur concurrently, and may require ongoing discussion and negotiation. Business development planning is an essential first step to create a solid foundation for future enterprise development. This might include a collaborative, community-led cultural business development planning process. It might include a guided or facilitated approach between all interested Indigenous representative groups (or individuals) to decide, together and, or separately, the kind of business development opportunity they wish to investigate and the approach to take, and discussion about internal governance of any future enterprise(s) (e.g. Stepwise 2017). For Giringun, it might include a *business development plan* that would not only provide an overview of the future direction of any enterprise but would also highlight the necessary Building Blocks (e.g. skills, certifications, permissions, governance structure, processes, and protocols) that would set a solid foundation for the enterprise.

Enterprise setup could include identification of partnership needs (e.g. knowledge, funding, and business support), their knowledge and skills needs (e.g. business development mentoring and support), potential partners (e.g. scientists, impact investors, philanthropists, and government) and partnership protocols (e.g. built on trust, protection for ICIP, and benefit sharing). For Giringun and the Giringun Nursery, this could include partnerships with government for business development funding support, philanthropists, impact investors, corporate investors/sponsors and with botanical scientists. It could include partnerships with other Indigenous bush product enterprises and, or alliances (e.g. Northern Australia Aboriginal Kakadu Plum Alliance) who already have experience with issues to do ICIP including the development of Access and Benefit Sharing Frameworks to be consistent with the Nagoya Protocol on Access and Benefit sharing (see Convention on Biological Diversity 2020); and partnerships with lawyers (e.g. Janke 2018; Janke and Sentina 2018) and, or researchers who specialise in ICIP and the Indigenous-led bush products sector (e.g. Robinson 2010; Lingard 2016; Lingard and Perry 2018; Robinson and Raven 2017; Robinson et al. 2018). Appropriate agreements would need to be negotiated between all partners, including for example with regard to leadership, acknowledgement of and protection for ICIP, and effective benefit sharing. In some circumstances, this would include commercialisation agreements that could withstand the potential for disputes over time. This phase might also include discussion about what kind of enterprise model might best suit the context. Product ideation, development, marketing, sales phase might include research and prototype development; consideration to market niche and feasibility testing; application for trademarks, certification, and other requirements; identification



of manufacturing, marketing, sales and distribution options (see Maclean et al. 2019).

### Potential enterprise development approaches and models (Fig. 4, Part 3)

Our practical tool also includes a focus on how particular enterprise development approaches and models can put culture at the centre of economic and enterprise development. Such approaches and models illuminate how local economies are linked to specific geographic places but do not evolve in isolation. Rather, they are part of specific Indigenous political economies, and local Indigenous bush product enterprise approaches can recognise that poverty alleviation is about more than simple increases in income but is also determined by how production is undertaken (and by whom), and whether these modes of production deliver benefits (and what kind of benefits) to the Aboriginal people involved (Yates 2009). In this way, Indigenous groups can operate within their local culture and Country to create products that reveal, promote, and strengthen their knowledge and their culture as part of the local, regional, and national Australian economy (Yates 2009). Enterprise development approaches and models can be based on the celebration and practice of the local customary economy, Indigenous world views and place-based ways of life. They can recognise and support local innovation that may result from, for example, the cultural and environmental advantages (rather than disadvantages) that can be derived from living in remote and regional Indigenous communities (Lovell et al. 2015).

Figure 4 is a representation of potential approaches and models with a focus on Indigenous ownership of different parts of the supply and value chain. Part 3.A shows a social enterprise approach premised on Indigenous ownership of the entire chain. For Giringun, a social enterprise approach could provide a way for the Nursery to continue as a ‘holding place for culture and knowledge’ and would require staff to extend on their current business development knowledge (e.g. enterprise develop planning and setup), and depending on their product ideation, they may need to extend their skills to include processing, manufacturing, marketing, sales, and distribution. This would take time and the social enterprise (and staff) could continue to struggle with an unreliable income stream.

Part 3.B is a Robinhood enterprise approach, which includes both an Indigenous social enterprise and an Indigenous for-profit enterprise. A Robinhood enterprise approach would require Giringun to develop a for-profit enterprise to support the important work of the Nursery (as a social enterprise). This could take pressure off the Nursery staff who indicated their lack of interest in marketing and sales. It would require a new enterprise to be developed specifically for the ‘business end’ of the value chain.

Part 3.C shows a potential partnership approach that might include an Indigenous social enterprise in partnership with a for-profit Indigenous or non-indigenous enterprise. A partnership approach might involve Giringun entering a joint venture with an existing for-profit enterprise (Indigenous or non-indigenous), it could, for example, involve the Nursery providing plant stock to be grown on nearby land owned by Giringun and support the sharing of cultural knowledge between Nursery staff, Elders, Indigenous Rangers, and others. The partner enterprise could provide business develop skills, training, knowledge, and networks to interested members of Giringun. It could purchase the Nursery’s raw bush products (e.g. fruits, seeds, and leaves) to process and manufacture into a product for national and international markets. One approach could be that the product be given an ‘Indigenous brand and story’, with some of the proceeds reinvested directly into the Nursery. Giringun would want to spend time to establish a trusting relationship with any such partner, to ensure the joint venture had structures to acknowledge and protect ICIP, Indigenous cultural governance and leadership.

### Conclusion: a practical tool to reconcile culture with economic development

Post-development scholars, Indigenous leaders and their partners call for alternative representations of ‘economy’ as diverse rather than as a ‘one-size-fits-all’ model. Concurrently, Indigenous leaders and researchers have identified the need for research to develop culturally appropriate business models that consider the unique interests of, and challenges faced by Indigenous people, and the co-benefits they derive from enterprises focussed on meaningful employment that enables them to care for their traditional estates. Our work investigated practical pathways for culturally grounded economic development. It complements this body of literature as we used and celebrated the alternative conceptualisation of economy to understand the various relations that influence the economic practices inherent to, for example, local Indigenous economies (e.g. cultural practices, cross-generational knowledge sharing, spiritual connection to country, imperatives to care for country, and linked co-benefits). We developed a ‘practical tool to enable Indigenous enterprise development planning to be grounded in culture’.

The tool provides Indigenous leaders, their partners and others, with a collaborative planning and action process to identify pathways and options for enterprise development. It aims to provide a way to build on local economies and ecologies, protect cultural integrity, and recognise the influence of extra-local political economies on lived experiences and outcomes. Each of the enterprise approaches and models presented would appear to have merits for an organisation such

as Giringun, yet each would require extensive investment of time, skills and knowledge development and networking. Indigenous leadership and cultural governance of the discussion and planning process is paramount to ongoing success. This is particularly the case with regards to ICIP, cultural Lore, identification of benefits and management and distribution of those benefits. Good leadership, although very challenging could result in extensive social and economic development options and pathways, yet poor leadership can result in divisions within and between communities. For some, the chance to leading to such division is considered too high. These leaders intentionally seek alternative means to generate income and benefits for their community in a way that does not risk the potential ‘commercialisation of culture’ and community division. The intension of this paper is not to downplay these challenges, rather to weave together post-development literature with sustainability science concepts and empirical research to provide a practical tool to enable discussion about future enterprises that can embrace culture as the enabler to local economic development. Our tool also provides a way for Sustainability Scientists, Post-development Scholars and Practitioners to extend upon and refocus existing models for (Indigenous) ecologically and culturally sustainable economic development and to consider its applicability in wider contexts. It is the hope that such enterprises that can operate within their local culture and Country to create products to reveal, promote and strengthen their knowledge and their culture as part of local, regional and national economies.

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## Declarations

**Conflict of interest** There are no conflicts of interests or competing interests.

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## References

- Aboriginal Bush Traders. 2024. Welcome to Aboriginal Bush Traders. <https://aboriginalbushtraders.com/6>. Accessed 29 Jan 2024
- Altman JC (2001) Sustainable development options on Aboriginal land: the hybrid economy in the twenty-first century. Centre for Aboriginal Economic Policy Research, Australian National University, Canberra
- Altman J (2005) Economic futures on Aboriginal land in remote and very remote Australia: hybrid economies and joint ventures. Centre for Aboriginal Economic Policy Research, Australian National University, Canberra
- Altman JC (2006) The Indigenous hybrid economy: a realistic sustainable option for remote communities? Centre for Aboriginal Economic Policy Research, Topical Issue no.2/2006, Australian National University, Canberra. [https://caep.cass.anu.edu.au/sites/default/files/docs/Altman\\_hybrid\\_0.pdf](https://caep.cass.anu.edu.au/sites/default/files/docs/Altman_hybrid_0.pdf). Accessed 29 Jan 2024
- Amoamo M, Ruckstuhl K, Ruwhiu D (2018a) Balancing indigenous values through diverse economies: a case study of Māori ecotourism. *Tour Plann Dev* 15(5):478–495. <https://doi.org/10.1080/21568316.2018.1481452>
- Amoamo M, Ruwhiu D, Carter L (2018b) Framing the Māori economy: the complex business of Māori business. *MAI J* 7(1):66–79. <https://doi.org/10.2050/MAIJournal.2018.7.1.6>
- ANAO (Australian National Audit Office) (2014) Administration of the biodiversity fund program. <https://www.anao.gov.au/work/performance-audit/administration-the-biodiversity-fund-program>. Accessed 28 Aug 2023
- Armstrong R, Morrison J, Yu P (2005) Indigenous land and sea management and sustainable business development in northern Australia. North Australian Indigenous Land and Sea Management Alliance (NAILSMA)
- BAC (Bawinanga Aboriginal Corporation) (2020) Community development program. <https://www.bawinanga.com/what-we-do/community-services/community-development-programme/>. Accessed 28 Aug 2023
- Banerjee S, Tedmanson D (2010) Grass burning under our feet: Indigenous enterprise development in a political economy of whiteness. *Manag Learn* 41:147–165
- Bargh M (2011a) Moving on from the developmental view of humanity. *Alternat Glob Local Polit* 36(1):79–85. <https://doi.org/10.1177/0304375411402022>
- Bargh M (2011b) The triumph of Māori entrepreneurs or diverse economies? *Aborig Policy Stud* 1(3):53–69. <https://doi.org/10.5663/aps.v1i3.12560>

- Bargh M, Douglas S-L, Te One A (2014) Fostering sustainable tribal economies in a time of climate change. *NZ Geogr* 70(2):103–115. <https://doi.org/10.1111/nzg.12042>
- Barr TL, Reid J, Catska P, Varona G, Rout M (2018) Development of indigenous enterprise in a contemporary business environment—the Ngāi Tahu Ahikā approach. *J Enterp Commun People Places Glob Econ* 12(4):454–471. <https://doi.org/10.1108/JEC-05-2016-0014>
- Bhabha HK (1994) *The location of culture*. Routledge, London
- Bodle K, Brimble M, Weaven S, Frazer L, Blue L (2018) Critical success factors in managing sustainable indigenous businesses in Australia. *Pac Acc Rev* 30:35–51
- Bruceckner M, Spencer R, Wise G, Marika B (2014) Indigenous entrepreneurship: closing the gap on local terms. *J Austral Indigen Issues* 17:2–24
- Burgess CP, Johnston FH, Bowman DMJS, Whitehead PJ (2005) Healthy country: healthy people? Exploring the health benefits of Indigenous natural resource management. *Aust N Z J Public Health* 29(2):117–122. <https://doi.org/10.1111/j.1467-842X.2005.tb00060.x>
- Bush Medijina (2018) Our story. <https://bushmedijina.com.au/>. Accessed 28 Aug 2023
- Bush Medijina (2020) Shop. <https://bushmedijina.com.au/collections/>. Accessed 28 Aug 2023
- Convention on Biological Diversity (2020) The Nagoya protocol on access and benefit-sharing. <https://www.cbd.int/abs/>. Accessed 28 Aug 2023
- Dockery AM (2010) Culture and wellbeing: the case of indigenous Australians. *Soc Indic Res J* 99(2):315–332
- Escobar A (1995) *Encountering development: the making and unmaking of the third world*. Princeton University Press, Princeton
- Fleming AE, Petheram L, Stacey N (2015) Australian indigenous women's seafood harvesting practices and prospects for integrating aquaculture. *J Enterp Commun People Places Glob Econ* 9:156–181
- Gibson K, Astuti R, Carnegie M, Chalernphon A, Dombroski K, Haryani AR, Hill A, Kehi B, Law L, Lyne I, McGregor A, McKinnon K, McWilliam A, Miller F, Ngin C, Occeña-Gutierrez D, Palmer L, Placino P, Rampangan M, Lei Lei Than W, Isiyana Wianti N, Wright S (2018) Community economies in Monsoon Asia: keywords and key reflections. *Asia Pac Viewp* 59(1):3–16. <https://doi.org/10.1111/apv.12186>
- Gibson-Graham JK (2005) Surplus possibilities: post development and community economies. *Singap J Trop Geogr* 26:4–26
- Gibson-Graham JK (2008) Diverse economies: performative practices for “other worlds.” *Prog Hum Geogr* 32:613–632
- Gibson-Graham JK (2014) Rethinking the economy with thick description and weak theory. *Curr Anthropol* 55:S147–S153. <https://doi.org/10.1086/676646>
- Girringun (2021a) Biodiversity & nursery program. <https://www.girringun.com/nativeplantnursery>. Accessed 28 Aug 2023
- Girringun (2021b) About. <https://www.girringun.com/about>. Accessed 28 Aug 2023
- Gorman J, Ennis G, Wurm P, Bentivoglio M, Brady C (2023) Aboriginal community views about a native plant-based enterprise development in Northern Australia. *Land* 12(5):1096. <https://doi.org/10.3390/land12051096>
- Hill R, Woodward E (2017) Kimberley ranger forum 2017 knowledge brokering activities and outcomes—a report to the Kimberley Land Council. CSIRO, Cairns. <https://neslandscapes.edu.au/wp-content/uploads/2018/03/Kimberley-Ranger-Forum-report.pdf>. Accessed 12 Dec 2023
- Hill R, Golson K, Lowe PA, Mann MK, Hayes S, Blackwood JE (eds) (2006) Kimberley appropriate economies roundtable forum proceedings. In: Convened 11–13 October 2005, Fitzroy Crossing, WA, by the Kimberley Land Council, Environs Kimberley and Australian Conservation Foundation. Australian Conservation Foundation, Cairns
- Hill R, Harding EK, Edwards DA, O'Dempsey J, Hill D, Martin A, McIntyre-Tamwoy S (2008) *A cultural and conservation economy for Northern Australia*. Retrieved from Canberra
- Hindess B (2007) The past is another culture. *Int Polit Sociol* 1(4):325–338. <https://doi.org/10.1111/j.1749-5687.2007.00024.x>
- Janke T (2018) From smokebush to spinifex: towards recognition of Indigenous knowledge in the commercialisation of plants. *Int J Rural Law Policy* 1:1
- Janke T, Sentina M (2018) Indigenous knowledge: issues for protection and management. Commonwealth of Australia, IP Australia
- Jarvis D, Stoeckl N, Addison J, Larson S, Hill R, Pert P, Lui FW (2018) Are Indigenous land and sea management programs a pathway to Indigenous economic independence? *Rangel J* 40(4):415–429. <https://doi.org/10.1071/RJ18051>
- Jarvis D, Maclean K, Woodward E (2021) The Australian Indigenous-led bush products sector: Insights from the literature and recommendations for the future. *Ambio* 51:226–240. <https://doi.org/10.1007/s13280-021-01542-w>
- Kimberley Land Council (2017) KLC cultural enterprises hub: mid year report, September 2017. <https://static1.squarespace.com/static/59f6e017db2ab70aa1874/t/5a96617353450a754a610bee/1519804816781/2017+Hub+Half+Yearly+Report+%28SMALL%29.pdf>. Accessed 12 Dec 2023
- Kothari R (1988) *Rethinking development: in search of humane alternatives*. Ajanta, Delhi
- KWG (Kimberley Wild Gubinge) (2020) About us. <https://www.kimberleywildgubinge.com.au/about-us>. Accessed 28 Aug 2023.
- Lavergne R, Saxby J (2001) Capacity development: vision and implication. Capacity development occasional series, vol 6088. Canadian International Development Agency, Gatineau, pp 1–11
- Lee LS (2012) Horticultural development of bush food plants and rights of Indigenous people as traditional custodians—the Australian Bush Tomato (*Solanum centrale*) example: a review. *Rangel J* 34:359–373
- Lingard K (2016) The potential of current legal structures to support Aboriginal and Torres Strait Islander interests in the Australian bush food industry. *Int J Sust Dev World* 23:174–185
- Lingard K, Perry M (2018) An assessment of the regulatory framework of the Western Australian sandalwood industry. *Aust for* 81:89–101
- Lovell J, Guenther J, Zoellner D (2015) Now you see it; now you don't. Looking for the ‘remote advantage’ in the development of Northern Australia, pp 41–63
- Maclean K, Ross H, Cuthill M, Rist P (2013) Healthy country, healthy people: an Australian Aboriginal organisation's adaptive governance to enhance its social–ecological system. *Geoforum* 45:94–105. <https://doi.org/10.1016/j.geoforum.2012.10.005>
- Maclean K, Robinson CJ, Costello O (2018) A national framework to report on the benefits of Indigenous cultural fire management. CSIRO, Australia
- Maclean K, Woodward E, Jarvis D, Rowland D, Rist P, Turpin G, Martin P, Glover R (2019) A strategic sector development and research priority framework for the traditional owner-led bush products sector in northern Australia. CSIRO, Australia
- Maclean K, Rassip W, Rist P (2020) Girringun Aboriginal Corporation future development aspirations for the Girringun native plant nursery. CSIRO, Australia
- Maclean K, Greenaway A, Grünbühel C (2022) Developing methods of knowledge co-production across varying contexts to shape Sustainability Science theory and practice. *Sustain Sci* 17, 325–332 (2022). <https://doi.org/10.1007/s11625-022-01103-4>

- Maclean K, Woodward E, Jarvis D, Turpin G, Rowland D, Rist P (2022) Decolonising knowledge co-production: examining the role of positionality and partnerships to support Indigenous bush product enterprises in northern Australia. *Sustain Sci* 17:333–350. <https://doi.org/10.1007/s11625-02100973-4>
- Maclean K, Hankins DL, Christianson AC, Oliveras I, Bilbao BA, Costello O, Langer ER, Robinson CJ (2023) Revitalising Indigenous cultural fire practice: benefits and partnerships. *Trends Ecol Evol*. <https://doi.org/10.1016/j.tree.2023.07.001>
- MARG, (Merne Altyerre-ipenhe (Food from the Creation time) Reference Group), Douglas J, Walsh F (2011) Aboriginal people, bush foods knowledge and products from central Australia: ethical guidelines for commercial bush food research, industry and enterprises. DKCRC Report 71. Ninti One Limited, Alice Springs
- McGregor A (2009) New possibilities? Shifts in post-development theory and practice. *Geogr Compass* 3(5):1688–1702. <https://doi.org/10.1111/j.1749-8198.2009.00260.x>
- McRae-Williams E, Guenther J (2014) Learning pathways for economic enterprise in remote Aboriginal communities: are Certificate IIIs the ticket. In: 17th AVETRA international conference: informing changes in VET policy and practice: the central role of research, Surfers Paradise, pp 22–24
- NAAKPA (Northern Australia Aboriginal Kakadu Plum Alliance) (nd) NAAKPA is an alliance of Aboriginal-owned companies supplying Kakadu Plum fruit and extracts for the Australian market. <https://naakpa.com.au/about>. Accessed 14 June 2023
- Robinson D, Raven M (2017) Identifying and Preventing Biopiracy in Australia: patent landscapes and legal geographies for plants with Indigenous Australian uses. *Aust Geogr* 48:311–331
- Robinson D, Raven M, Hunter J (2018) The limits of ABS laws: why Gumbi Gumbi and other bush foods and medicines needs specific Indigenous knowledge protections. In: Adhikari K, Lawson C (eds) *Biodiversity, genetic resources and intellectual property*. Routledge, New York
- Robinson D (2010) Traditional knowledge and biological product derivative patents: benefit-sharing and patent issues relating to Camu Camu, Kakadu Plum and Açai Plant Extracts. In: *Traditional knowledge bulletin—topical issues series*
- Rostow W (1960) *The stages of economic growth: a non-communist manifesto*. Cambridge University Press, Cambridge
- Ruwhiu D, Arahanga-Doyle H, Donaldson-Gush R et al (2022) Enhancing the sustainability science agenda through Indigenous methodology. *Sustain Sci* 17:403–414. <https://doi.org/10.1007/s11625-021-01054-2>
- Sachs W (ed) (1992) *The development dictionary: a guide to knowledge as power*. Zed Books Ltd., London
- Said E (1979) *Orientalism*. Routledge, London
- Santos de Sousa B (2004) The WSF: toward a counter-hegemonic globalization. In Sen J, Anand A, Escobar A, Waterman P (eds) *World social forum: challenging empires*. The Viveka Foundation, New Delhi, pp 235–245. [http://www.choike.org/nuevo\\_eng/informes/1557.html](http://www.choike.org/nuevo_eng/informes/1557.html)
- Shiva V (1993) *Monocultures of the mind: perspectives on biodiversity and biotechnology*. Zed Books Ltd, London
- Spencer R, Brueckner M, Wise G, Marika B (2016) Australian indigenous social enterprise: measuring performance. *J Enterp Communities People Places Glob Econ* 10:397–424
- Stepwise (2017) Overview. <http://www.stepwise.net.au/what/index.php>. Accessed 29 Aug 2023
- Sylvester C (1999) Development studies and postcolonial studies: disparate tales of the ‘Third World.’ *Third World Q* 20(4):703–721
- Vázquez-Maguirre M (2020) Building sustainable rural communities through indigenous social enterprises: a humanistic approach. *Sustainability* 12(22):9643. <https://doi.org/10.3390/su12229643>
- Walsh F, Douglas J (2011) No bush foods without people: the essential human dimension to the sustainability of trade in native plant products from desert Australia. *Rangel J* 33:395–416
- White J (2012) Indigenous peoples’ livelihoods and emerging bush produce industries—recent experiences from Australia’s arid zone. *Centre for rural health and community development and school of psychology, social work and social policy*. University of South Australia, Adelaide
- Woodward E, Jarvis D, Maclean K (2019) *The Traditional Owner-led bush products sector: an Overview*. CSIRO, Australia
- Yates P (2009) The bush foods industry and poverty alleviation in central Australia: part 1. Job, Peg (ed) [online]. *Dialogue (Academy of the social sciences in Australia)* 28:47–56
- Zurba M, Maclean K, Woodward E, Islam D (2019) Amplifying Indigenous community participation in place-based research through boundary work. *Prog Hum Geogr* 43(6):1020–1043. <https://doi.org/10.1177/0309132518807758>

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