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INDIGENOUS FISHERIES

key messages from
frdc-irg research

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We acknowledge the Traditional Owners of Country throughout Australia and recognise their continuing connection to land and water.

We pay our respects to their Elders past, present and emerging.



NOTES

FRDC-IRG funded projects use ethical research methodologies and take place on Country with the consent of Traditional Owners.

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ACRONYMS

ACL.....	Aboriginal Coastal Fishing License
AFMA.....	Australian Fisheries Management Authority
EPBC.....	Environmental Protection and Biodiversity Conservation
FRDC.....	Fisheries Research and Development Corporation
IRG.....	Indigenous Reference Group
NIFTWG.....	National Indigenous Fisheries Technical Working Group
RD&E.....	Research Development and Extension
TEK.....	Traditional Ecological Knowledge
TFK.....	Traditional Fishing Knowledge



SUMMARY

Indigenous communities in Australia have utilised, shared and traded marine resources since time immemorial. These communities continue to hold strong connections and knowledge to aquatic ecosystems and biological resources, and fishing remains embedded in their cultural, social and economic lives.

Since the early stages of colonisation, the ability of Indigenous fishing communities to access their fisheries for both cultural and commercial purposes has been disrupted by external factors, including the policies and practices of the Australian state.

In recent history international agreements have been put in place to protect Indigenous rights to access and manage their fisheries worldwide. The Australian government has an obligation to ensure the protection of Indigenous peoples access to their land and sea. Yet there still remains a gap in the aspirations of Indigenous community for their fisheries and formal fisheries management arrangements.

Presently, the Commonwealth, States and Territories define and recognise Indigenous fisheries through different legislation, policy and practices. In turn, there is an identified need for a comprehensive set of national principles to guide the development, implementation and monitoring of Indigenous fisheries policy across all jurisdictions.

The key messages that have been identified through the findings of recent FRDC-IRG research projects present opportunities for various levels of government to proactively assist and support Indigenous fishing communities to access and utilise their fisheries in ways that align with Indigenous aspirations.

BACKGROUND

In 2011 the Fisheries Research and Development Corporation (FRDC) and the Indigenous Reference Group (IRG) on fisheries held a national forum to discuss issues around Indigenous involvement in fishing and seafood based Research, Development and Extension (RD&E). Participants at the forum included Aboriginal and Torres Strait Islander people with experience or expertise in fishing, seafood, or natural resource management across Australia as well as a small number of non-Indigenous participants (Calogeras et al. 2012).

In 2012, participants were brought back together to review and endorse the work that the IRG was tasked, and to confirm that the outputs and the outcomes aligned with the desires of the group. Through this process, the IRG developed a set of eleven principles and five priorities to guide RD&E for and about Indigenous fishing in Australia (Calogeras et al. 2012). Based on the issues identified at the forums, the FRDC-IRG have supported a number of projects focused on Aboriginal and Torres Strait Islander fisheries.

This report offers fisheries stakeholders with a concise summary of recent research regarding the challenges and opportunities facing the Indigenous fisheries sector. It entails a synthesis of the findings from FRDC-IRG projects, presented through a set of five key themes that were echoed across the research analysed. These themes provide a framework for integrating the findings from the projects and for linking the findings to the IRG principles for RD&E.

FRDC-IRG PROJECTS

seven FRDC-IRG projects and their objectives

1. Indigenous Cultural Fishing and Fisheries Governance. Stephan Schnierer (2012-216)

1. Use methodology developed in project 2009/038 to estimate indigenous cultural catch in coastal and inland waters of N.S.W.
2. Develop a local indigenous fisheries management plan for the Tweed region.
3. Identify other Aboriginal communities that would be willing to develop local fisheries management plan.

2. Optimising management of tropical reef fish through the development of Indigenous scientific capability. Thor Saunders (2013-017)

1. Gain information on stock structure of key tropical reef species.
2. Develop Indigenous capability in scientific monitoring and participation in co-management through the development of a certified training program.
3. Identify appropriate spatial scale of management for tropical reef fish based on biological sustainability and sectoral aspirations.

3. Building the Capacity and Performance of Indigenous Fisheries. Ewan Colquhoun (2013-218)

1. Identify case study fishing communities, document aspirations and capacity, identify constraints to development outcomes, and test micro development pathways.
2. Evaluate business models, conduct analyses and document development pathways to enhance Indigenous participation in and benefits from fishery development.
3. Establish and document output and extension strategies for the IRG and participating regional Indigenous fishing communities.
4. Document and report learnings case studies, models, performance monitoring arrangements, and recommendations that will enhance future Indigenous fishery performance and community benefits.

4. Improving access for Indigenous Australians to and involvement in the use and management of Australia's fisheries resources. Stephan Schnierer (2014-233)

1. Review how Indigenous fisheries (ICF) 'issues' are addressed by fisheries management in Australia: (a) broadly, in policy and strategy, legislation, RD&E, reporting etc.; (b) specifically, in the assessment of impacts of non-Indigenous fisheries (nIF) on ICF; both to develop practical guidelines that deliver best practice.
2. Conduct a national Indigenous workshop to develop a methodology to assess impacts of nIF on ICF and the associated risk factors and two Indigenous workshops at state/territory level focusing an iconic species targeted in IF and nIF to trial and refine the methodology.
3. Write reports in appropriate language for activities in objectives 1 and 2 outlining the outcomes.



5. Indigenous fishing subprogram: Mapping livelihood values of Indigenous customary fishing.

Luke Smyth (2015-205)

1. Identify cultural, social and economic values of Indigenous fishing at selected case study communities.
2. Articulate connections between established Indigenous land and sea management regimes.
3. Indigenous aspirations in fisheries.
4. Support the recognition of Indigenous values and use of aquatic resources in fisheries management.
5. Build Indigenous and non-Indigenous capacity for collaborative fisheries research and management.

6. Business Nous – Indigenous business development opportunities and impediments in the fishing and seafood industry.

Jill Briggs (2016-206)

1. An analysis tool to assess the success elements of indigenous fishing businesses and non-fishing Indigenous businesses
2. A gap analysis of skills available and skills needed to develop and/or enhance the skills of people involved in Indigenous fishing businesses.
3. Draft and finalise a Business template with conversation and workshop materials to enhance the Indigenous communities connected to Indigenous fishing.
4. Enhance the business skills of Indigenous fishing communities through the delivery of workshops, community conversations and virtual information sharing sessions.

7. 'Wave to plate' establishing a market for Tasmanian cultural fisheries.

Emma Lee (2016-204)

1. Adapt successful terrestrial model to marine environments, investigating specific conditions of Tasmanian Government policy relating to Indigenous peoples.
2. Assess cultural fishery extensions within commercial operations and determine best practice for government and industry partners.
3. Explore the network chain opportunities for Indigenous involvement in food tourism.
4. Develop postgraduate Indigenous research capacity and broaden scope of marine studies in academia.

8. Business opportunities and impediments for Aboriginal community development in supportive fishing industries in the Roper River to Robinson River area of the Northern Territory.

Lorrae McArthur (2016-201)

1. The overarching objective is to build the capacity of the Wurrailiba Management Committee in identifying well founded opportunities to grow local fishing sector economies, realising impediments and developing a strategy of steps to bring opportunities to fruition.
2. Ensure community based planning approaches inform the project and meet specific needs of the community, particularly Aboriginal social and cultural aspirations in fishing and seafood sectors, which are often missed in mainstream planning stages.
3. Support best practice through informed consent from Traditional Owners in all stages of enterprise development on their land and tidal waters.
4. Develop Traditional Owners networks with fishing industries, local Aboriginal Ranger programs, local business, relevant agencies and other stakeholder interests.
5. Facilitate robust communication and relationship building among Traditional Owners and stakeholders through forums and consultations.
6. Raise community awareness through networks and communication materials.
7. Support a consultative process that facilitates the mapping of existing local fishing activity and services and identifies needs as well as new opportunities and gaps.
8. Refine interests into potential business scenarios that can be used in a second phase of this project, which is to develop and test the feasibility of business cases.
9. Report for the community that will provide a legacy product to assist the Wurrailiba Management Committee in setting priorities and developing its interests over the next 10-15 years.

5 KEY MESSAGES

findings from the FRDC-IRG research

1. Indigenous fisheries

The definition of Indigenous fisheries must be clarified by Commonwealth, State and Territory governments. Recognising and respecting Indigenous values, worldviews and traditional knowledge will be an essential part of the development of Indigenous fisheries in Australia as a distinct sector.

This process will entail identifying barriers to Indigenous fishing, the impacts of non-Indigenous fishing on Indigenous fisheries and engaging with diverse views within Indigenous communities about the inclusion of commercial activities within the definition of Indigenous fisheries.

2. governance and management

Space must be made in fisheries governance and management for Indigenous aspirations and priorities to be addressed. Increased employment opportunities, joint management, the creation of Indigenous advisory committees and Indigenous representation on fisheries departments, boards and organisations would be a proactive step towards these objectives.

3. legislation and policy

Indigenous fishing has been defined and recognised through different legislation, processes, policies and practices across the Commonwealth, State and Territory governments.

This disjointed context could be addressed through the development of a set of national Indigenous fishing principles to guide Indigenous fisheries policy across all jurisdictions.

4. economic empowerment

There are great disparities in the characterisation of Indigenous fisheries across jurisdictions in Australia and the definition generally excludes fishing for commercial purposes.

Trade and barter have always been part of Aboriginal and Torres Strait Islander livelihoods and the social, cultural and economic aspects of fishing are interconnected.

Indigenous fishing that is aimed at meeting the economic needs of Indigenous communities includes processes of kinship, reciprocity and Indigenous worldviews within economic exchanges. It therefore does not fit in to the limited boundaries of the commercial sector.

5. capacity building

The inclusion of Indigenous communities in fisheries management would involve a substantial investment in capacity building initiatives driven by Indigenous peoples.

Support for upskilling Indigenous fishers, the creation of opportunities within fisheries management and two-way sharing of knowledge are all vital components for proactive engagement with Indigenous fishing communities.

Capacity building, including cultural awareness training for non-Indigenous stakeholders, is going to play an important role in successful outcomes and positive changes moving forward for the Australian fishing industry.



INTRODUCTION

Indigenous peoples have internationally recognised rights to use and access their fisheries resources based on the prior and continuing occupation of land and sea territories. These rights include the collective right to self-determination to pursue their own development and to choose how to address their spiritual, cultural, social and economic needs through the management of their cultural fisheries (United Nations 2007). However, the rights of Indigenous fishers in Australia are limited because there is no treaty or instrument of law that sets out the rights to an allocation of the allowable catch at a national level (Briggs 2020, p.34).

In recent years, the Commonwealth, State and Territory governments of Australia have taken steps to recognise Indigenous rights to access and utilise their resources, yet there are still gaps in fisheries policies when it comes to supporting Indigenous priorities, values and economic development initiatives (Smyth et al. 2018). These gaps need to be addressed in order for Indigenous cultural, economic and social aspirations to be realised.

While there are Indigenous fishing principles that act as guidelines, there is currently no national policy framework in Australia for Indigenous fishing. In turn, there are inconsistencies across jurisdictions in relation to Indigenous fisheries, how they are recognised and managed (Colquhoun 2017; Schnierer et al. 2018; Lee 2018).

The FRDC-IRG are supporting research projects that build knowledge and attempt to address gaps in research about Indigenous fisheries. The next step is to extend these research findings and to acknowledge them within policy and fisheries management arrangements across Australia.

The FRDC-IRG research reviewed for this report highlights some of challenges and priorities for Indigenous fishing communities in terms of access and use of their fisheries. An understanding of Indigenous values as well as Indigenous fishing rights within fisheries agencies is a key starting point. Making space in governance and management for Indigenous voices has also been identified as an important part the process for Indigenous communities to have a greater say in the policies that affect their fisheries and in turn, their livelihoods. Many fishing communities have expressed the desire to capitalise on their fisheries in order to enhance the economic development of their communities as well as to enhance capacity building opportunities in the area of the fisheries.

Fisheries agencies, like all other government and non-government institutions in Australia, have a responsibility to safeguard Indigenous rights to land and sea territories and ensure that fisheries policies do not further entrench socio-economic inequalities in Australian society.

This report synthesises the most recent research for and about Indigenous fisheries and identifies their key messages. In turn, it sheds further light into contemporary issues that affect Indigenous livelihoods and highlights some potential ways forward in addressing the major challenges that Indigenous peoples in Australia face in terms of the access and use of their fisheries.



INDIGENOUS FISHERIES

For Aboriginal fishing communities and Torres Strait Islanders, the connections and values around the marine and fresh water environment, both ancient and recent, are vital to their livelihoods. Fishing, and the ability to access, manage, trade and rely on their natural resources sustains their economic, social and cultural wellbeing as well as their spiritual, physical and mental health. It is embedded in every aspect of their lives (Schnierer & Egan 2015; Smyth et al. 2018).

There is a current need to characterise Indigenous fisheries (also referred to as cultural or customary fisheries) in Australia as its definition varies across jurisdictions.



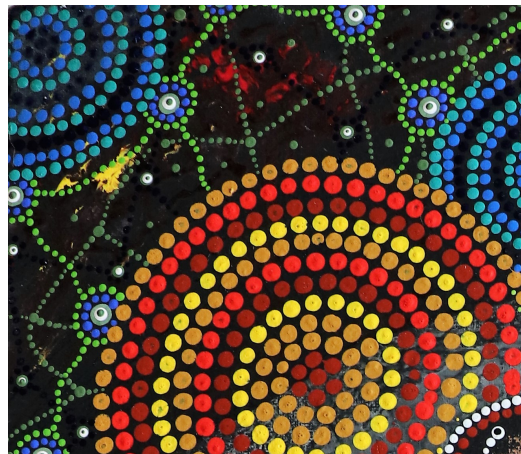
inherited responsibility

The ways in which Indigenous peoples utilise and manage the biophysical environment has grown out of dependence on nature and natural resources for their livelihood security. In turn, fishing, hunting and maintaining sea territories utilises thousands of years of inherited customary knowledge and is governed by a system of Traditional Ecological Knowledge (TEK) or more specifically, Traditional Fishing Knowledge (TFK) (Lee 2019).

The right to manage their aquatic resources aligns with inherited cultural responsibilities that have been passed down through generations (Smyth et al 2018). Children often accompany adults on fishing outings and this creates opportunities for the generational transfer of TEK to continue (Schnierer & Egan 2015, p.28).

The Indigenous fisheries in Australia today reflect these ongoing connections to land and sea and therefore encompass more than Western ideas of sustainability and conservation. They balance social and cultural values with economic values of fishing (Smyth et al. 2018 p.53). They are therefore distinct and extend beyond the boundaries of the current recreational and commercial fishing sectors in Australia (Lee 2019).

The IRG has highlighted the need for Indigenous fisheries to be implicitly recognised as a definitive sector within each level of the fishing and seafood industry. In turn, the IRG specify the need for RD&E that seeks to enhance Aboriginal and Torres Strait Islander recognition (Principle 1).



a process of colonisation

The process of colonisation in Australia has, at various stages, affected Indigenous peoples in different ways. Some fishing communities' access to their land and sea became fractured with forced removals. In other areas, government authorities historically encouraged Indigenous communities to use the land and sea for subsistence and for the commercial activities of the state (Smyth et al. 2018).

State policies and practices have often restricted the ability of Indigenous peoples to use resources in ways that maintain their cultural practices and their knowledge systems (Schnierer et al. 2018). As the fisheries in Australia became progressively more regulated, Indigenous access generally became more limited, particularly in terms of the ability to continue trading or selling their catch (Smyth et al. 2018, p.55).

In particular, Indigenous fishers were barred from directly managing their lands and waters by stringent government policies. Decision-making in the fisheries became something that belonged to government agencies and scientific managers, tailored to the needs of both recreational and commercial sectors at the expense of Indigenous communities (Smyth et al. 2018). Indigenous priorities, values and knowledge systems became marginalised by the state through the process of colonisation. In turn, Indigenous communities continue to be cautious of fisheries managers and researchers (Schnierer & Egan 2015, p.29).

Despite these challenges, Indigenous communities continue to maintain their inherited responsibilities to their land and sea territories and to exert their rights to access, use and manage their fisheries. However, trust needs to be further developed between Indigenous fishers, researchers and managers (Schnierer & Egan 2015, p.29)

The IRG supports the need to develop, maintain and improve Indigenous peoples continuing access to aquatic resources and important areas by emphasising the need for RD&E that seeks to resolve issues around access (Principle 2).

two worldviews ... two sets of values

European colonisation brought with it a different set of values towards the environment which has led to a conflict of two worldviews about land and sea management (Lee 2019). Dominant Western understandings of the environment centre around conservation and sustainability, where humans, land and the sea are separated (Lee 2019, p.98). This environmental governance does not reflect Indigenous worldviews which entail a much more holistic notion of the land and sea being interrelated (Lee 2019, p.17).

Indigenous fishing, which encompasses commercial, recreational, spiritual, health and social principles, is not recognised as such by the Commonwealth, State and Territory governments (Schnierer et al. 2018). Instead, it is relegated to fit into Western understandings of the fisheries which have separated activities into either Indigenous cultural activities, commercial activities or recreational activities (Lee 2019).

Aboriginal and Torres Strait Islander peoples in Australia manage land and sea territories according to the rules and customs passed down to them from their ancestors. However, Indigenous fishers have highlighted that legal rights to fish often have not translated to the protection of these rights (Smyth et al. p.57).

In light of these issues, Smyth et al. (2018) have documented Indigenous fishing values across Australia (SA, NT and NSW) to identify cultural, social and economic values of Indigenous fishing and to articulate connections between established Indigenous land and sea management regimes. Many Indigenous fishers today reinforce the view that traditional owners' have rights to use and manage their resources however they see fit, including selling their catch, yet there are diverse views within and between Aboriginal and Torres Strait Islander communities (Smyth et al. 2018, p.54).

impacts on Indigenous fisheries

Historically, Indigenous peoples access and management of their fisheries has been restricted by the introduction of State-level fisheries legislation during the early 20th century, which often benefited the economic interests of non-Indigenous actors (Smyth et al. 2018, p.8). Indigenous fishers have voiced concerns about the overexploitation of the fisheries and ongoing unsustainable practices of the commercial sector (Schnierer et al. 2018; Smyth et al. 2018).

In the Northern Territory, there have been substantial declines in key reef fish species. Current harvest levels of these species, which are targeted by both commercial and recreational fishing sectors, have been identified as unsustainable due to overfishing. These species have also been identified as important for the Indigenous fisheries. The lack of knowledge about stock structure and total harvest across sectors has meant that managers have not been able to put strategies in place to curb their decline (Saunders et al. 2017, p.6-7).

In recent research conducted by Schnierer et al. (2018), a series of case study workshops were undertaken with Indigenous fishers to identify non-Indigenous impacts on Indigenous fisheries using an Ecologically Sustainable Development risk assessment framework developed by Fletcher et al. (2002). Indigenous fishers raised the issue of the impact of commercial operations on; the environment (trawling, rubbish dumping and overfishing); the health of communities; and on being able to continue practicing culture and carrying out cultural responsibilities.

Research conducted by Smyth et al. (2018, p.29) also highlights Indigenous concerns about the strict regulation of Indigenous fisheries by fisheries management and enforcement. Participants emphasised the way that Indigenous fisheries are used as a focus for sustainability issues while the total take of the Indigenous fisheries pales in comparison to the total take of the commercial fisheries.

The non-Indigenous fishing sectors may be negatively impacting Indigenous fisheries and impeding the ability for Indigenous fishers to access key target species. Yet, there is a gap in the current knowledge about the impact of fisheries management arrangements (commercial, recreational etc.) and the impact of non-Indigenous fishers on Indigenous fisheries (Schnierer et al. 2018).

In order to address this gap, Schnierer et al. (2018 p.5) recommend that all fisheries legislation should include a requirement to assess the impacts of non-Indigenous fisheries on Indigenous cultural fishing and provisions to protect and enhance Traditional Fishing Knowledge

The IRG has raised the need to assess and mitigate the fishing and non-fishing impacts on Aboriginal and Torres Strait Islander cultural catch and practices. They specify the need to develop RD&E that seeks to improve knowledge and awareness of the impacts on the environment and traditional harvest (Principle 8).

concluding remark

The definition of Indigenous fisheries must be clarified by Commonwealth, State and Territory governments. Recognising and respecting Indigenous values, worldviews and traditional knowledge will be an essential part of the development of Indigenous fisheries in Australia as a distinct sector.

This process will entail identifying barriers to Indigenous fishing, the impacts of non-Indigenous fishing on Indigenous fisheries and engaging with diverse views within Indigenous communities about the inclusion of commercial activities within the definition of Indigenous fisheries.

GOVERNANCE AND MANAGEMENT

Indigenous fishers have emphasised that fisheries management, legislation, regulations and enforcement create the institutional barriers that block them out of the fisheries, disrespect their unique rights and oftentimes criminalise their fishing practices (Smyth et al. 2018 p. iv; Schnierer et al. 2018 p.7).

A restriction on accessing aquatic resources directly and indirectly affects all other facets of Aboriginal and Torres Strait Islander identities. On the other hand, supporting Indigenous management of aquatic resources through their own priorities and values could generate positive effects for their health, wealth and wellbeing (Smyth et al. 2018 p.iii).

The IRG has identified the need to develop processes that best align with Aboriginal and Torres Strait Islander peoples' needs, including self management or co-management which incorporates TFK arrangements and techniques.

In doing so, they have underscored the need for RD&E that seeks to improve governance and provides pathways to better representation and management models (Principle 3).

perceptions & experiences

Indigenous fishers perceive that fisheries management to date has not adequately respected and supported Indigenous fisheries. The common history that Indigenous peoples have of marginalisation by the state has resulted in Indigenous fishers across Australia voicing similar concerns about being 'locked out' of their customary fisheries and excluded from decision-making processes (Smyth et al. 2018; Schnierer et al. 2018).

Indigenous fishers have emphasised the barriers placed on their ability to access their fisheries by non-Indigenous governance and management arrangements (Schnierer et al. 2018, p.135). These arrangements are seen to be hindering their access to fisheries and actively blocking their rights to maintain cultural practices and to derive commercial benefits from the fisheries (Schnierer et al. 2018 p.135). Regulations and enforcement decisions that do not respect or acknowledge native title rights of fishers, often criminalise Indigenous fishing activities and unfairly target Aboriginal fishers (Smyth et al 2018, p.iv).

The legal right to fish in Australia has not equated to the full use of this right or the protection of Indigenous fishing values at a level satisfactory to Indigenous fishers. In turn, Indigenous fishing communities continue to be cautious in respect to governing agencies (Schnierer & Egan 2015).



In research undertaken by Smyth et al. (2018) documenting the livelihood values of Indigenous customary fishing in Australia, the research team found that fishers aspired to have more control over the management of their fisheries.

Motivations included the ability to influence management policies to be more accommodating of Indigenous fishing practices but also to increase their capacity to care for country and fulfil their obligations in managing their resources (Smyth et al. 2018, p.63).

In developing a local Aboriginal fisheries management strategy for the Tweed region in NSW, Schnierer and Egan (2015) found that while many communities were interested in developing local management plans, there are very few existing ones for researchers and communities to draw on (Schnierer & Egan 2015, p.29). Furthermore, due to cultural sensitivities, the researchers emphasised the need for Indigenous communities to control and drive the process before other stakeholders were involved (Schnierer & Egan 2015, p.34).

Indigenous representation

Indigenous fishing communities have made it clear that they would like greater involvement in managing their sea territories and fisheries, from decision making through to enforcement (Colquhoun 2017; Lee 2019; Schnierer et al. 2018; Sinclair et al. 2020; Smyth et al. 2018, p.v).

Independent Indigenous governance bodies have also been identified as a priority for working with industry, government and other stakeholders (Sinclair et al. 2020, p.39). Participatory action research was undertaken by Sinclair et al. (2020, p.165) with Yanyuwa Traditional Owners in the Northern Territory. The project participants revealed that governance frameworks regarding sea Country need to be Traditional Owner-driven and to support cultural governance.

The concerns of many Indigenous peoples regarding recognition, loss and use of TFK also cements the importance of having Indigenous representation advising government agencies, organisations and boards involved in fisheries. As TFK becomes integrated into mainstream fisheries policies and practices there must also be a consideration that it does not become misappropriated by non-Indigenous agencies.

Only approximately half of the jurisdictions surveyed by Schnierer et al. (2018) make it a requirement to involve Indigenous peoples in management through identified positions or on advisory or consultative committees (p.40). The audit found no Indigenous engagement strategy or operational plan for any jurisdictions across Australia (Schnierer et al. 2018, p.46). This sort of strategy could guide agencies towards more inclusive approaches in ensuring Indigenous participation, for example by being inclusive of local community structures which feed into specific Indigenous advisory committees or through the inclusion of Indigenous individuals on other fisheries advisory committees (Schnierer et al. 2018, p.46).

Cultural management units or liaison officers within agencies may also serve to aid in developing networks between Indigenous communities, research, industry and government groups (Lee 2019, p.46). The inclusion of Indigenous values, concerns and decision-making in fisheries governance and management is going to be a crucial factor in ensuring that Indigenous voices are not lost amongst other community interests and fishing sectors (such as commercial and recreational).



**'The audit found no
Indigenous engagement
strategy or operational
plan for any jurisdiction
across Australia'**

Schnierer et al. 2018, p.46

advisory committees

According to Schnierer et al. (2018, p.40) some jurisdictions have initiated the establishment of advisory committees within their agencies. For example, the Aboriginal Fishing Advisory Council (NSW) provides advice to the Minister for Primary Industries on issues affecting Aboriginal fishing and the Torres Strait Regional Authority have also had an Indigenous Fisheries Advisory Committee since 2010 (Schnierer et al. 2018, p.40).

Having a dedicated Indigenous advisory committee within fisheries agencies is one avenue for supporting Indigenous involvement in fisheries governance and decision-making. An Indigenous advisory committee makes visible Indigenous priorities, values and challenges to Indigenous primacy in natural resource management (Lee 2019, p.61).

Whilst opportunities on advisory committees is one step towards a more inclusive approach in the fisheries, it is not entirely sufficient in terms of ensuring participation and building capacities of Indigenous peoples to actively engage in these positions (Lee 2019, p.46).

Establishing exclusive decision-making frameworks, governance bodies and corporations was seen as an assertion of rights by Traditional Owners in their pathways towards enabling economic development through their fisheries (Sinclair et al. 2020, p.22). The lack of having a decision-making authority was seen by some Indigenous communities in the Northern Territory as the greatest impediment to economic development.





joint management

Alongside Indigenous advisory committees, Lee (2019) outlines that in Tasmania, a combination of joint management, handback or buyback of fishery quota could lead to more equity for Aboriginal Tasmanians to access marine resources (Lee 2019, p.65).

Joint management is one avenue that agencies can take to include Indigenous communities in the decision-making processes and management of the fisheries. The process essentially involves power-sharing, a devolution of management practices to Indigenous communities and the right to unimpeded access to cultural resources (Department of Primary Industries, Parks, Water and Environment 2016 cited in Lee 2019, p.27).

According to Saunders et al. (2017, p.61) increased Indigenous research capabilities in the fisheries long term is expected to assist in the move towards a joint-management model whereby both research and management capability resides within Indigenous communities. Joint management also means cost-savings for government agencies as they take on a more administrative role with fewer staff.

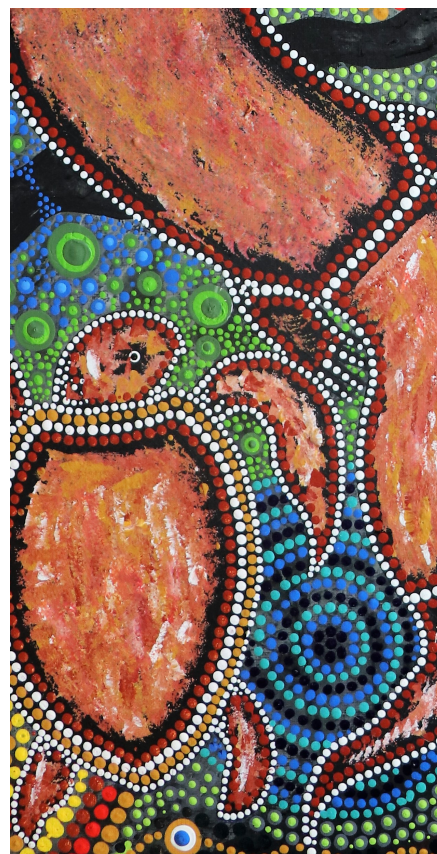
As Lee (2019, p.21) asserts, joint management can be seen as a way of articulating the right of Indigenous peoples to shape future engagement and decision-making in the fisheries as well as improving relationships between stakeholders. It can also be an opportunity to build Indigenous capacities (Sinclair et al. 2020, p.131) and is a competitive strength for Indigenous fishing ventures because it shows experience in managing marine based projects (Colquhoun 2017, p.187).

concluding remark

Space must be made in fisheries governance and management for Indigenous aspirations and priorities to be addressed. Increased employment opportunities, joint management, the creation of Indigenous advisory committees and Indigenous representation on fisheries departments, boards and organisations would be a proactive step towards these objectives.

LEGISLATION AND POLICY

Indigenous peoples have internationally recognised rights to self-determination and rights to access and manage their natural resources. In Australia, the legal recognition of Indigenous rights to cultural resources has been a slow process and there is little consistency within legislation and policy when it comes to Indigenous fisheries. Importantly, Indigenous communities do not currently own the decision-making processes to determine how their fisheries are managed, even in regions where there has been continuous access to resources (Smyth et al. 2018).



inconsistency across jurisdictions

There is no national Indigenous fisheries policy framework in Australia. Indigenous fishing is recognised through various legislation, processes, policies and practices across the Commonwealth, States and Territories (Colquhoun 2017). This creates significant gaps in policies and practices as there is no best practice approach in the management of Indigenous fisheries (Schnierer et al. 2018).

There is a lack of nuance in appreciating the connections between Indigenous fishing values and activities, and fisheries laws and regulations often limit the ways that Indigenous fishing communities can use, manage and benefit from their resources (Smyth et al. 2018 p.8). These gaps in legislative, regulatory and policy areas highlights the neglect in understanding Indigenous interests in fisheries (Lee 2019, p.17).

An imbalance also exists across the jurisdictions in terms of interest and investment in supporting Indigenous fisheries rights, with the majority of investment skewed towards Northern Australia (Lee 2019). There is a need for each jurisdiction to develop more focussed strategies that 'support Indigenous rights to an equitable allocation of catch, access to commercial fisheries opportunities, engagement in fisheries management and capacity building for management and use of fisheries resources.' (Schnierer et al. 2018 p.46)

An Ecosystem Based Fisheries Management approach is the overarching framework used by AFMA in the management of Commonwealth fisheries (Schnierer et al. 2018, p.43). Within the ecosystems based approach it is vital that Indigenous presence in ecosystems is recognised and protected as part of world's best practice. Schnierer et al. (2018, p.43) suggest that in order to move towards consistency across jurisdictions, an ecosystems based approach to fisheries management ought to be adopted by the Commonwealth and all States and Territories.

Summary of Jurisdictional Legislation Impacting Indigenous Fisheries

The table below, developed by Colquhoun et al. (2017, p.54), presents the status and opportunity for jurisdictional progress to achieve outcomes promulgated in the National Native Title 2004 Communiqué on Indigenous Fishing. Note, the boxes shaded grey denote that there has been no progress in these areas.

	1. Legislative recognition	2. Policies or strategies	3. Practices & initiatives	4. Customary take or allocation	5. Management engagement	6. Capacity building, employment/training	7. Licence allocation	Scores
Northern Territory	YES, customary harvest is exempt from Fisheries Act	Dept. Strategic Plan and Divisional Strategic Plan 2018-22 Indigenous Fishery Development Unit 22% Indigenous employment	Fisheries R&D Indigenous engagement policy Aboriginal Fishing Mentor Program Aboriginal Aquaculture Research Projects Marine Ranger Support Program Aboriginal Marine Training Program	Catch shares allocated to customary sector (Spanish Mackerel) Recognised as a sector in other fisheries	Indigenous Sea Rangers have compliance powers Marine Ranger Program Indigenous representatives in Fisheries Management Committees	Indigenous Maritime Training Program Apprenticeships Cadetships Aquaculture research programs on low technology species in remote communities	Aboriginal Coastal Licence	7
Australian Fisheries Management Authority	YES, Torres Strait Fisheries Act	Commercial and cultural objectives prescribed in Protected Zone Joint Authority and Torres Strait Regional Authority	Torres Strait Treaty 1985	Right to take fish for commerce or trade Indigenous sector recognised	Sea ranger program assistance Protection Zone Joint Authority	Commercial objectives prescribed by the Torres Strait Regional Authority	100% of finfish licences held by Torres Strait Indigenous people	7
South Australia	YES, Fisheries Management Act 2007 (FMA) Native title rights as authorised by the Native Title Act 1993 are not affected by the Fisheries Management Act	Aboriginal traditional fishing management plans. Traditional Fisheries Manager employed Aquaculture zone Amendment 2017 – Pt Pearce Indigenous zone Treaty negotiations	Indigenous Land Use Agreement Aboriginal Fisheries Officer Career Pathway Program Ministerial exemptions for regulated devices employed for Traditional fishing.	Aboriginal Traditional Fishing recognised as a sector in the FMA Allocation Policy	Under the FMA the Minister and a Native Title group may make a Traditional Fishing Management Plan under an Indigenous Land Use Agreement	Aboriginal Fisheries Officer Career Pathway Program PIRSA tertiary scholarships Traineeships	Treaty process may provide funding to access the commercial/ aquaculture sectors	7

	1. Legislative recognition	2. Policies or strategies	3. Practices & initiatives	4. Customary take or allocation	5. Management engagement	6. Capacity building, employment/training	7. Licence allocation	Scores
New South Wales	YES, but limited to non-commercial use of catch S37 authorisation for Aboriginal cultural harvest (non-commercial Exemption from Recreational Fishing fee	Indigenous Fisheries Strategy and Implementation Plan 2002 Aboriginal Engagement and Cultural Use of Fisheries Resources in NSW Marine Parks 2015 Inclusion in NSW Fisheries Resource Sharing Policy 2015 Inclusion in Fisheries NSW Strategic Research Plan 2014-2018	Aboriginal Fishing Trust Fund-grants/loans for Aboriginal cultural fishing and for development of Aboriginal fisheries related businesses Aboriginal Fishing and Cultural workshops for Aboriginal children	Indigenous fisheries recognised as a sector Aboriginal Cultural Fishing Interim Access Arrangement	Aboriginal Fishing Advisory Council (AFAC) Membership on Ministerial Fishing Advisory Committee and Commercial Fishing Advisory Council Local Aboriginal Fisheries Management Plan Development	Workshop for incoming AFAC members Cross cultural workshops for Fisheries staff Local Fishing Management Strategies Aboriginal Fishing Trust Cultural Training for DPI officers Recognition in Cultural Fishing –no longer part of Recreational Sector		6
Western Australia	YES	Customary Fishing Policy 2009		Catch share for customary sector (Lobster, Abalone)	Joint Management and Native Title Agreements			4
Victoria	NO, Traditional Owner recognition permit only	Aboriginal Fishing Strategy Victorian Fisheries' aim is to employ 5% Indigenous staff			Developing engagement practices in Fisheries Management			3
Queensland	YES, legislative defence provision for customary take	Indigenous Fishery Strategy 2002 2018 strategy in process	Indigenous fishing permit		Indigenous fisheries recognised as a sector		No licence or catch allocation	4
Tasmania	YES, limited to recreational limits	Permits for customary or communal fishing						2
Scores	8	8	5	5	7	4	3	



'There is a need for each jurisdiction to develop more focussed strategies that support Indigenous rights to an equitable of allocation of catch, access to commercial fisheries opportunities, engagement in fisheries management and capacity building for management and use of fisheries resources.'

Schnierer et al. 2018 p.46

a policy framework

In 2004, the National Indigenous Fishing Technical Working Group (NIFTWG) developed a policy framework for Indigenous involvement in fisheries management alongside seven principles. In 2018, Schnierer et al. conducted an extensive review of Commonwealth, State and Territory fishing legislation that revealed the degree of inclusion of the seven NIFTWG principles within fisheries legislation, policy, management and strategies.

After auditing 669 documents, the research team found the inclusion of the NIFTWG principles varied; 4% of documents addressed all seven principles 53% of documents addressed none of the seven principles (Schnierer et al. 2018, p.4). As a result of the audit, the following is recommended:

- **a more comprehensive set of national Indigenous fisheries principles to guide policy across all jurisdictions.**
- **a specific objective addressing Indigenous cultural fishing included in all fisheries acts, across all jurisdictions.**

traditional fishing knowledge (TFK)

Until recently, Indigenous governance structures have been entirely overridden by the environmental management discourses of the state. TFK has historically been ignored in formal fisheries management and policy of the state. Recently, there has been a worldwide focus on integrating TFK into mainstream natural resource management (Schnierer et al. 2018).

Indigenous communities have raised concerns about the inclusion, use and misappropriation of TFK by non-Indigenous state and non-government agencies. The concerns highlight the ways that TFK, which is of high spiritual and cultural significance, could be integrated into a system where the capitalist economy takes priority (Smyth et al. 2018, p.55). Concerns also cement the importance of having Indigenous representation advising government agencies, organisations and boards involved in fisheries.

The IRG have identified these concerns within their principles and recognised the importance for RD&E that leads to recognition of customary rights and knowledge, including processes to incorporate Aboriginal and Torres Strait Islander Traditional Fishing Knowledge (TFK) and Traditional Fisheries Management (TFM) (Principle 7). Principle 9 also highlights the need for RD&E that seeks to provide management arrangements that lead to improved access, protection and incorporation of Traditional Fishing Knowledge and Traditional Fisheries Management input to processes.



The Environmental Protection and Biodiversity Conservation (EPBC) Act emphasises the need to 'promote the use of Indigenous peoples' knowledge of biodiversity with the involvement of, and in co-operation with, the owners of the knowledge.' The protection or use of Indigenous TFK was not addressed within any of the extensively audited fisheries related legislation in Australia (Schnierer et al. 2018, p.41). In turn, Schnierer et al. (2018, p.5) emphasises the need to protect and enhance TFK within all fisheries acts, across all jurisdictions.

concluding remark

Indigenous fishing has been defined and recognised through different legislation, processes, policies and practices across the Commonwealth, State and Territory governments.

This disjointed context could be addressed through the development of a set of national Indigenous fishing principles to guide Indigenous fisheries policy across all jurisdictions.



ECONOMIC EMPOWERMENT

Indigenous peoples have exclusive and non-exclusive legislated rights to 40% of the Australian land mass (Colquhoun 2017, p.27). Seafood and experiential tourism are two of the world's largest industries in terms of economic flows. Unlike Indigenous fishers in Canada and New Zealand, there are limited, if any, examples in Australia of successful Indigenous fisheries or seafood businesses with Indigenous board, management and investment that operate across the seafood product and service value chain (Colquhoun 2017).

The legislative and policy support for Indigenous fishers to benefit from the commercial fisheries is limited (Schnierer et al. 2018, p.5). Government policies in Australia generally encourage Indigenous communities to retain cultural practices and use economic development as a way out of poverty, recognising the long history of barter and trade in Indigenous communities. On the other hand, there are explicit regulatory barriers that prevent them from engaging in the commercial fisheries, for example the prohibition of selling cultural catch (Lee, 2019, p.35). Therefore, if Indigenous fishers seek to commercialise their Indigenous fisheries they must generally do so through the same channels as non-Indigenous actors (Smyth et al. 2018, p.8).

The IRG has identified the need for RD&E that leads to an increased value for Aboriginal and Torres Strait Islander people (economic, social, cultural, trade, health and environmental). They cite the need to improve the overall wellbeing of Aboriginal and Torres Strait Islanders through the involvement in the fishing and seafood industry (Principle 10). RD&E that leads to benefit sharing will be a crucial part of Aboriginal and Torres Strait Islanders deriving benefits from the use of fish stocks and fishing rights (Principle 11).

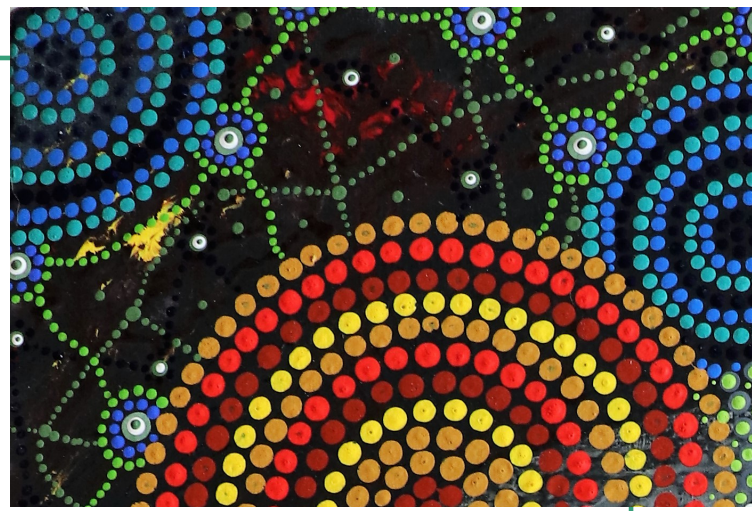
cultural economies

Trade and barter of catch has always been part of Aboriginal and Torres Strait Islander use of fisheries and a key part of their economic livelihoods. It is important to note that for many Indigenous communities, the social, cultural and economic values of fishing are interconnected, therefore economic aspects do not supersede cultural and lifestyle values of fishing (Smyth et al. 2018 p.57).

Subsistence fishing also has an economic value in that Indigenous communities who have access to their fisheries can trade them or spend less money on food, making the fisheries an asset to unemployed or low income families (Smyth et al. 2018, p.35).

Aboriginal and Torres Strait Islander peoples have repeatedly expressed the desire to use their fisheries as a way to meet their socio-cultural and economic needs. They also have ongoing aspirations for self-determination, and many communities see the fisheries as an avenue towards these aspirations (Schnierer et al. 2018). Indigenous coastal communities generally maintain their customary fisheries yet the pursuit of economic development in this area remains limited (Colquhoun 2017, p.193)

The FRDC (2019) states; 'fishing by Aboriginal and Torres Strait Islander people covers the full spectrum of fishing practices: customary, recreational and commercial.' Across the Commonwealth, States and Territories, governments recognise cultural fishing as a separate sector to the recreational and commercial fisheries. The question over whether or not Indigenous fishing includes commercial activities varies across the jurisdictions. Some Australian jurisdictions (Torres Strait Islands, Northern Territory, Queensland and New South Wales) encourage and support commercial fishing for Aboriginal and Torres Strait Islander peoples within their policies, yet for most cases the definition of Indigenous fishing excludes commercial fishing (Schnierer et al. 2018).



Lee (2019) outlines the policy contradictions in attempting to establish a cultural fisheries market in Tasmania. Using Indigenous wild-catch for commercial purposes is prohibited, yet Aboriginal Tasmanians are encouraged to take certain marine resources for the production of shell necklaces and other arts to be sold (Lee 2019, p.24). These sorts of tensions relegate Indigenous fishing to cultural activities while excluding Indigenous communities from commercial gain, reinforcing historical stereotypes (Lee 2019, p.24).

For Indigenous communities, the economy is tied in with other values such as social, cultural, governance and health, therefore, consideration must be made for the extent and avenue through which Indigenous communities want economic development to occur (Colquhoun 2017, p.40-41).

Indigenous trade also incorporates processes of kinship and reciprocity and it forms the basis for relationships (Lee 2019, p.20). A cultural economy can therefore be defined as 'historical transactions occurring in new environments' and it may provide opportunities to introduce a new economic model by including Indigenous worldviews (Lee 2019, p.19).

Results from the project undertaken by Smyth et al. (2018, p.55) indicate that Indigenous peoples narratives around 'cultural-commercial' fishing varies. These variations will need to be seriously considered in future economic development of the Indigenous fisheries.





commercial licensing

Indigenous people who want to partake in commercial fisheries currently must purchase a licence or shares in a quota in the commercial fishing industry in order to derive economic benefits from their resources. The levels of Indigenous participation in commercial fisheries around Australia is not fully understood except in NSW (Schnierer & Egan 2015). What is known is that Indigenous participation in the commercial sector is currently limited, as is the legislative and policy support for it (Smyth et al. 2018, p.8).

Schnierer et al. (2018) have highlighted the problematic nature of this process due to:

- **The limited availability of licenses in closed fisheries**
- **Evolving management arrangements that pressure Indigenous fishers to leave**
- **Limited capacities for Indigenous fishers to deal with changes**
- **Inadequate legislative and policy support**
- **High cost of buying commercial licenses**

The option of partially commercialising Indigenous fisheries to support community and economic development has been largely unavailable (Smyth et al. 2018, p.8).

However, there are currently three jurisdictions that support some forms of commercial activities (Schnierer et al. 2018, p.40):

- The Torres Strait Fisheries Act (1984) actively promotes economic development through the fisheries.
- The Northern Territory has an Aboriginal Coastal Fishing Licence (ACL) which allows Aboriginal people to catch and sell fish within their communities (with certain restrictions).
- Queensland has an Indigenous Fishing Permit allows for Aboriginal or Torres Strait Islanders to trial commercial fishing for up to three years through an application process.
- New South Wales has a trust that provides funds for Aboriginal people to maintain existing commercial fishing licence or to acquire a licence through an application process.



support and resourcing

Schnierer et al. (2018, p.45) have noted that increasing Indigenous participation in commercial fisheries needs:

- Improved legislative and policy support
- Innovative strategies
- Review of existing strategies that are currently in operation
- Changes to the Native Title Act to include the use of fisheries resources for commercial purposes

Support in the form of resources has been identified throughout the recent FRDC-IRG research as an important part of allowing Indigenous communities to retain cultural practices as well as to engage in the fisheries for economic development (Colquhoun 2017; Lee 2019). Indigenous fishers have repeatedly underscored the fact that financial capital (grants and loans) is needed to set up businesses and pay for licences, boats, gear and other assets and operational costs (Smyth et al. 2018, p.58). The need for resourcing has also been highlighted by Lee (2019, p.32) who stresses that for a cultural economy to survive it requires access to resources such as quota, research, access to policy-makers, places to enact cultural practices and capacity-building.



Indigenous community business

According to Colquhoun (2017) Indigenous peoples' fishing rights are not currently flowing into beneficial economic outcomes for communities. Their limited economic engagement with their fisheries resources means that these resources are underutilised when it comes to economic development.

Colquhoun (2017) engaged with seven Indigenous fishing ventures across six jurisdictions in Australia in a project aimed at building the capacity and performance of Indigenous community fisheries across Australia. He suggests that economic empowerment of Indigenous Australians engaged in the fisheries will occur through a pathway to stable employment, built on good governance and the development of learning and skills and supported by education, training, mentoring that meets the needs of communities (Colquhoun 2017).

Local community microbusinesses are critical to improving outcomes in Indigenous fisheries as they put management decisions and economic power in the hands of families and clans (Colquhoun 2017, p.14). One of the major findings that came from this research was that governance within case study communities was mostly a model of cultural governance. This is where community aspirations are defined across families and clans.

In order for communities to achieve their aspirations in the economic development of their fisheries, Colquhoun (2017, p.48) concludes that cultural governance must be aligned and balanced with the commercially driven corporate governance which relates to business objectives rather than community objectives.



Case study: The Northern Territory

In the Northern Territory, ACL's allow Indigenous people to participate in small-scale fishing ventures. The aim of the licence is to act as a step towards entry into the commercial fisheries by building the skills of Aboriginal fishers (Sinclair 2020). The Northern Territory Fisheries also have an Aboriginal Fishing Mentor Program to assist in this transition. Limitations to the ACL's include gear restrictions and holders of ACL's cannot sell species of high commercial value such as Barramundi, King Threadfin, Spanish Mackerel, Trepang or Mud Crab.

Sinclair et al. (2020) undertook participatory action research with Yanyuwa Traditional Owners to identify their rights, interests, and ideas around business and employment opportunities in sea Country-based industries. The project highlighted that approaches to Aboriginal community development and economic development that seek only to engage Aboriginal participation as job seekers or training in local fishing sector development programs will leave inherent tensions unaddressed. In turn, the research team recommends that the Northern Territory Fisheries establish a process with Yanyuwa Traditional Owners to develop an appropriate fishing enterprise model.

Fisheries stakeholders were brought together for a Summit in 2018 (Sinclair et al. 2020, p. 158) which was organised through the FRDC-IRG project and hosted by Yanyuwa Traditional Owners. Indigenous fishers discussed the benefits of using ACL's, including strong leadership from Elders to run business, being in charge of their business, providing healthy food for family and community, earning income, learning from experiences. Challenges using the ACL's were also discussed including, differences in catch day to day, inability to access to roads and Country during wet season, limitations of species, systems of record keeping, running a sustainable development model, and being careful to prevent flooding the market (Sinclair et al. 2020, p.157).

Three themes were prioritised during the Summit by Indigenous fishers for the future:

Healthy land and water

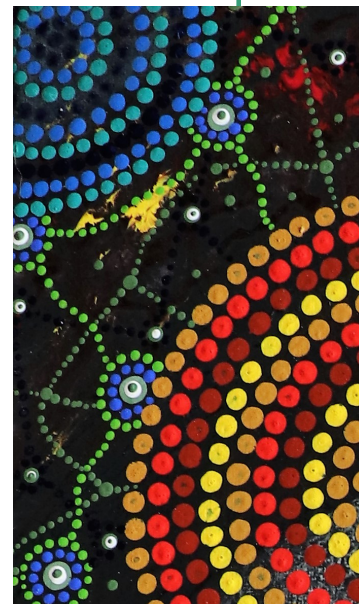
Before any business is developed, Yanyuwa People want to make sure the resources these businesses rely on – the fish and water – are healthy. This includes having more Yanyuwa Rangers looking after Country and making sure those others using Country's resources are also looking after Country.

Strong governance

Opportunities for Traditional Owners in the industries across Sea Country need to be driven by Traditional Owners themselves. This requires building strong Yanyuwa governance to support Traditional Owners driving their own businesses and employment.

Business knowledge

Many fishing business opportunities for Yanyuwa People were talked about but, before there is any commitment to establish a business, Yanyuwa People want to continue building business knowledge.



specific considerations for Indigenous fishing businesses

Through their interviews with Indigenous business owners across Australia, Briggs (2020) have summarised key concepts that are important in understanding issues specific to Indigenous fishing businesses. These include:

- The provision of fish for family and community
- Providing work opportunities for community
- Location of the business
- Inclusion of Elders in decision-making
- Community obligations and expectations
- Cultural obligations
- Traditional Knowledge

Other issues relevant to Indigenous business owners at a macro level include:

- Navigating legislative and licensing requirements (language, remoteness, cultural barriers and insensitivities)
- Lack of understanding by non-Indigenous actors about community expectations, cultural obligations and traditional knowledge

what constitutes a successful Indigenous fishing business?

In addition to standard business practices, interviewees described a successful business as one which:

- Pays your wages
- Delivers a product to market
- Is competitive
- Is culturally aligned
- Has a good governance structure
- Is financially sound

'I understand my country, I understand lore and law and I have been part of a successful family fishing business in the sea country that is mine.'

The success of my business is directly connected to the control of the resource and the water we fish. This control is secure through a right that allows me and my people to fish the resource in a manner that is respectful of our history and involves the ongoing connection and communication with our elders. We are aware of our cultural obligations and see that others who come into our territory are not. We are also aware of the business culture of non-Indigenous people but we are all Australians.

We have skills built from our thousands of years of connection to our country and we can operate in the non-Indigenous business sector because we have attended formal training in business management courses.'

**Indigenous Fishing Business Owner
(cited in Briggs 2020, p.61)**

concluding remark

There are great disparities in the characterisation of Indigenous fisheries across jurisdictions in Australia and the definition generally excludes fishing for commercial purposes.

Trade and barter have always been part of Aboriginal and Torres Strait Islander livelihoods and the social, cultural and economic aspects of fishing are interconnected.

Indigenous fishing that is aimed at meeting the economic needs of Indigenous communities includes processes of kinship, reciprocity and Indigenous worldviews within economic exchanges. It therefore does not fit in to the limited boundaries of the commercial sector.

building skills

In reviewing the NIFTWG principles, Schnierer et al. (2018) draw attention to Principle 7 which outlines the need to accelerate Indigenous vocational development. The research team found that there is little support for this principle within legislation, policy and strategy documents in the fisheries (Schnierer et al. 2018, p.45).

Building Indigenous organisational capacity is also a vital aspect of Indigenous fisheries development as it can provide an avenue for culturally appropriate decision-making, identifying opportunities to grow local fishing sector economies, realise impediments and identify opportunities (Sinclair et al. 2020).

Land and sea ranger programs have been identified as one successful way of developing the skills and capacities of Indigenous communities to sustainably manage their resources and to increase their involvement in co-management of their fisheries resources (Saunders et al. 2017, p.61). The programs combine rangers' cultural knowledge with funding and training programs to develop skills in compliance and research (Saunders et al. 2017, p.10). These ranger programs are viewed as a solid starting point in developing the skills of Indigenous communities in co-managing natural resources. However, they also need to be paired with new capital investment and an increase in commercial skills for greater economic development (Colquhoun 2017, p.14).

CAPACITY BUILDING

The historic marginalisation of Indigenous peoples, their knowledge and their values has had an effect on the ways in which Indigenous communities are able to partake in decision-making over their land and sea resources. The dominance of Western scientific and technical approaches to natural resource management also means that many Indigenous peoples have limited capacities to fully participate in the management of their aquatic resources.



business capacity

Insufficient capacities of Indigenous fishers to deal with changes in the fishing industry has meant that the level of participation within the commercial fisheries is limited (Schnierer et al. 2018, p.45). Capacity building is anticipated to lead to increased commercial opportunities and management roles for Aboriginal and Torres Strait Islander people arising from resource use and access. Therefore, support in the area of capacity building will be a significant part of enabling Indigenous communities to effectively engage in the rapidly evolving fisheries environment (Schnierer et al. 2018, p.7).

Colquhoun (2017) found that Indigenous fishing businesses usually had clear aspirations at the start of their ventures but these were often stalled through the development of the business. The comprehensive project found that Indigenous communities within seven case studies all lack the experience and commercial skills to conceptualise, design, create, and operate a viable commercial fishery business (Colquhoun 2017, p.199). This underscored the need for every business initiative to take part in capacity building initiatives through a formal process facilitated by people with commercial experience in the fisheries (Colquhoun 2017, p.194).

Briggs (2020, p.31) also notes that there are various knowledge gaps for Indigenous business owners when it comes to running fishing businesses. These gaps span from knowledge about government assistance, to understanding commercial viability, the legislative frameworks for businesses and business and marketing plans.

The IRG has also highlighted the need to identify opportunities to reduce the costs and complexity of resourcing and funding for Aboriginal and Torres Strait Islanders. In turn, RD&E should seek to provide resourcing options in a user friendly and culturally appropriate manner to encourage greater Aboriginal and Torres Strait Islander involvement in the fisheries (Principle 4).

research, development & extension

The FRDC-IRG research that has been reviewed for this report has shown that supporting Indigenous aspirations in the management of their fisheries has the potential to lead to positive social, cultural and economic outcomes for entire communities.

For effective policy, research must entail ethical research methodologies and engage with a range of worldviews that shape Indigenous fisheries (Lee 2019, p.26-36). Capacity building becomes a two-way obligation. Working with communities, understanding their priorities, and being aware of cultural sensitivities is an essential part of developing trust and sharing knowledge between researchers, fisheries managers and Indigenous participants (Schnierer & Egan 2015).

The IRG identified the need for capacity building within RD&E. Principle 5 emphasises RD&E that leads to improved capacity that empowers Aboriginal and Torres Strait Islanders. Each FRDC-IRG project referenced through this report has had elements within their methodology that have focussed on capacity building. This has played an important role in addressing the IRG principles and prioritising Indigenous capacity building within the research process. This should continuously be made a priority for all research projects, particularly those that occur within, for or about Indigenous communities.

Colquhoun (2017) aimed to build the capacity and performance of seven Indigenous community ventures across Australia. The project team sought to identify national level impacts as well as local level impacts that affect the success of community fisheries. In turn, they documented gaps in management models and policy and reported their learnings to enhance Indigenous fishery performance.

Smyth et al. (2018) provided training to community research project officers for conducting research interviews and analysing qualitative data across three case study regions in Australia.

Schnierer and Egan (2015) adopted a collaborative approach involving culturally appropriate engagement with Indigenous people as both 'givers' and 'receivers' of information and researchers took the time to develop trust in communities and promote a two-way sharing of knowledge.

Schnierer et al. (2018) conducted workshops with Indigenous fishers which involved a two-way exchange of knowledge. Researchers collected data and provided information on risk assessment methodology and other fisheries management issues to workshop participants.

A training program for Indigenous rangers was developed as part of a project undertaken by Saunders et al. (2017). The Certificate II in sampling and analysis provided increased scientific monitoring capability to Indigenous participants and initially three Indigenous communities were participating in scientific monitoring programs on a fee for service. However, recently this has declined to one community providing scientific monitoring capability with a stronger focus on Indigenous Ranger Groups developing fishery compliance capability (Saunders et al. 2017).

Lee (2019, p.14) was the first project in Tasmania that an Aboriginal Tasmanian postdoctoral researcher has led into Aboriginal Tasmanian interests in marine resources and fisheries in Tasmania. The project has been important in developing postgraduate Indigenous research capacity and broadening scope of marine studies in academia.

Briggs (2020) aimed to deliver responsive learning to Indigenous fishing businesses that would assist them in running successful and sustainable businesses. The project assessed the skills and knowledge required for the success of Indigenous business. The project team then developed culturally appropriate learning materials, including a website, videos and presentations.

Sinclair et al. (2020) used participatory action research to build the capacity of the Wurrahiliba Management Committee to identify well founded opportunities to grow local fishing sector economies, realise impediments, and develop a strategy of steps to bring opportunities to fruition.

cultural awareness training

The IRG has highlighted the need to ensure that government, as part of its responsibility to consult and engage with Aboriginal and Torres Strait Islander people on resource use, undertakes such discussions in a supported and culturally appropriate way. In turn, Principle 6 highlights the need for RD&E that leads to agencies developing capacity to recognise and utilise Aboriginal and Torres Strait Islander expertise, processes and knowledge.

A two-way sharing of knowledge should be undertaken to extend to building the cultural awareness of non-Indigenous stakeholders, including non-Indigenous fishers, researchers, policy-makers and managers in the fisheries industry. Fisheries stakeholders, whether they be from private companies, non-government organisations or government agencies would benefit from education aimed at creating a greater understanding of Indigenous priorities, worldviews, protocols and rights.

concluding remark

The inclusion of Indigenous communities in fisheries management would involve a substantial investment in capacity building initiatives driven by Indigenous peoples.

Support for upskilling Indigenous fishers, the creation of opportunities within fisheries management and two-way sharing of knowledge are all vital components for proactive engagement with Indigenous fishing communities.

Capacity building, including cultural awareness training for non-Indigenous stakeholders, is going to play an important role in successful outcomes and positive changes moving forward for the Australian fishing industry.



CONCLUSION

The values and worldviews of Indigenous peoples have sustainably managed the natural environment and supported their livelihoods for thousands of years across all of Australia. These values and worldviews continue today and are the avenue through which Indigenous communities seek to maintain, access and make use of their natural resources.

While there have been improvements in recognising Indigenous rights to access and manage their natural resources, there are still gaps between current fisheries policy and Indigenous aspirations in the fisheries sector. The FRDC-IRG projects that this report has synthesised have generated important research findings, making positive strides in helping to bridge these policy gaps. Their findings provide an opportunity to inform decision-makers on the most recent developments in the Indigenous fisheries as well as Indigenous fisher priorities for their fishery resources.

The most recent FRDC-IRG research about Indigenous fisheries in Australia has brought to the fore five key themes that are significant for future decision-making in the fisheries in Australia. These themes are all interrelated and a thorough understanding of them is important for anyone interested in Indigenous fisheries development. They include:

1. Indigenous fisheries
2. Governance and management
3. Legislation and policy
4. Economic empowerment
5. Capacity building

Fisheries agencies now have an opportunity to proactively lead the process for positive change towards equality in the fisheries. The next step in fisheries management arrangements and policy making could have the potential to unlock unrealised benefits socially, environmentally and economically for both the state and Indigenous communities.

Proactive action would entail supporting a pathway of self-determination where all of the themes in this report are incorporated into the culture of Australian fisheries agencies in order to arrive at a place where Indigenous communities drive the policy processes that affect their livelihoods, health, culture and economies.

An overall openness to engage with Indigenous worldviews, values and aspirations for their fisheries must underpin fisheries governance, management, legislation and policy in Australia so that partaking in the fisheries enhances rather than further marginalises Indigenous communities.



REFERENCES

Briggs, J. Affectus P/L. (2019) IRG Business Nous – Indigenous business development opportunities and impediments in the fishing and seafood industry. FRDC Project 2016-206 Rutherglen, VIC

Calogeras, C. (2012) Second Fisheries Research and Development Corporation (FRDC) Indigenous Research, Development and Extension (RD&E) Forum, QLD

Colquhoun, E. (2017) Building the capacity and performance of Indigenous fisheries. FRDC Project 2013-218, QLD <http://frdc.com.au/project/2013-218> accessed March 2020

Fletcher, W. J., Chesson, J., Fisher, M., Sainsbury, K. J., Hundloe, T., Smith, A.D.M. and Whitworth, B. (2002) National ESD Reporting Framework for Australian Fisheries: The 'How To' Guide for Wild Capture Fisheries. FRDC Project 2000/145, Canberra, Australia, 120 pp. http://www.fisheriesesd.com/a/pdf/HOW_TO_GUIDE_V1_01.pdf. accessed March 2020

Fisheries Research & Development Corporation 2019, 'Indigenous Fishing', https://www.frdc.com.au/environment/indigenous_fishing/Pages/default.aspx, accessed March 2019

IRG Business Nous website (2020) <https://www.irgbusinessnous.com.au>, accessed March 2020

Lee, E. (2019) 'Wave to Plate': Establishing a market for cultural fisheries in Tasmania, Swinburne University of Technology, Melbourne, and University of Tasmania, Hobart, Report to FRDC, FRDC Project 2016-204, May 2019 <https://www.frdc.com.au/project/2016-204> accessed March 2020

National Native Title Tribunal 2004, Fishing principles to guide Indigenous involvement in marine management, The Principles Communiqué on Indigenous Fishing, <https://www.atns.net.au/agreement.asp?EntityID=3797> accessed March 2020

Saunders, T., Barton, D., Crook, D., Ovenden, J., Newman, S.J., Saunders, R., Taillebois, L., Taylor, J., Travers, M.J., Dudgeon, C., Maher, S. and Welch, D.J. (2016) Optimising the management of tropical reef fish through the development of Indigenous scientific capability. Darwin, Northern Territory, Fishery Report No. 117. FRDC Project 2013-017, NT <http://frdc.com.au/Archived-Reports/FRDC%20Projects/2013-017-DLD.pdf> accessed March 2020

Schnierer, S. and Egan, H. (2015). Indigenous Cultural Fishing and Fisheries Governance. Report to the Fisheries Research and Development Corporation, FRDC Project 2012-216, Canberra <https://www.frdc.com.au/project/2012-216> accessed May 2020

Schnierer, S., Egan, H., Calogeras, C., Lui, S. and Schnierer, L (2018) Improving access for Indigenous Australians to, and involvement in, the use and management of Australia's fisheries resources, FRDC Project 2014-233, NSW. <http://www.frdc.com.au/project/2014-233> accessed March 2020

Sinclair, M., Dulfer-Hyams, M. & Nona, H. The Northern Land Council (2020) Business opportunities and impediments for Aboriginal community development in supportive fishing industries in the Roper River to Robinson River area of the Northern Territory. Final report to the Fisheries Research and Development Corporation, FRDC Project 2016-201, Canberra

Smyth, L., Egan, H. and Kennett, R. Australian Institute of Aboriginal and Torres Strait Islander Studies (2018) Livelihood values of Indigenous customary fishing: Final report to the Fisheries Research and Development Corporation, FRDC Project 2015-205, Canberra <http://www.frdc.com.au/project/2015-205> accessed March 2020

United Nations. General Assembly. United Nations Declaration on the Rights of Indigenous Peoples. New York: United Nations, 2007. 1-15