



### **Social Matters**

### Social Science and the Australian Seafood Industry

Our past, our future

Tanya J King & Kate J. Brooks

2018

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#### Social Matters: Social Science and the Australian Seafood Industry; our past, our future

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**FRDC Contact Details** 

25 Geils Court

02 6285 0400

02 6285 0499

Deakin ACT 2600

frdc@frdc.com.au

www.frdc.com.au

#### **Researcher Contact Details**

Name:	Tanya King	Address:
Address:	Locked Bag 20,000	
	Geelong, Vic, 3220	Phone:
Phone:	03 52577149	Fax:
Email:	tanya.king@deakin.edu.au	Email:
		Web:
Name:	Kate Brooks	

Address:	PO Box 3287	
	Prahran East, VIC 3181	

Phone: 03 9927 2665

Email:Kate@kalanallysis.com.auWeb:www.kalanalysis.com.au

In submitting this report, the researcher has agreed to FRDC publishing this material in its edited form.

### Foreword

We are pleased to present this report, *Social Matters: Social Science and the Australian Seafood Industry; our past, our future*, which represents a significant resource for those interested in Australian fisheries research and governance, including researchers, managers and policy makers.

The aims of the overall project were:

- To workshop and build upon the thematically documented FRDC audit of Social Science research (FRDC2009/317);
- To workshop and thematically document current and ongoing research activities and drivers of participants. They key to this objective is the identification of research-setting processes, and the ways in which social scientists perceive gaps in knowledge and how this might be better aligned with the voices of industry; needs of public management and public interest;
- Updated themes, key gaps and emerging issues (from 2009/317) that can be drawn upon by RACs in the immediate future;
- 4. Sharing of knowledge regarding emerging methodologies to maximise contributions of the social scientists to the investigations of identified challenges and research pathways;
- 5. Improved connections between social scientists and a fostering of a coherent voice for social science research in Australia that can be drawn upon to respond collectively to the industry's needs to address emerging issues.

This project addresses the FRDC Human Dimensions Research, Development and Extension Plan 2017 – 2020 goals, particularly the fourth and fifth:

- 4. Effective engagement to achieve socially-supported fisheries and aquaculture.
- 5. Enhancing human dimensions RD&E.

The project collated references to social science research from the past ten years, increasing the 2009 database from 163 to over 300 entries (both academic and grey literature). The data has been added to an online <u>Mendeley</u> account ('owned' by Tanya King). The account acts as a living database and will grow as more publications are added. This resource is now freely available and represents a significant resource for Australian fisheries governance, and will be distributed to key fisheries governance stakeholders under the guidance of the FRDC HDR. The reference list is included (see Appendix 4) as at the time of report submission.

The key activity of the project was the inaugural dedicated meeting of Australian seafood industry social scientists. The workshop was organised as a two-day workshop at Deakin University, with 20 participants representing a range of universities, research and government organisations.

In addition to Australian scholars from all States, and the ACT, the project invited Ratana Chuenpagdee, who leads the international network of small scale fisheries, 'Too Big To Ignore' which is based out of Memorial University, New Foundland CA. Insights from Professor Chuenpagdee significantly enhanced the discussion and helped to position the network within the global framework. The key contribution from Professor Chuenpagdee related to the challenges and opportunities presented when establishing a network. These included, ensuring a clear agenda for a network (rather than a discreet project which is seen as closed ended) with articulated values that have commonalities across groups. Social Network Analysis (SNA) and Discourse analysis can be useful to understand the properties of the networks, the actors involved and their concerns, and in so doing understand how practicing social scientists can better utilise these networks and build social capital. Such a network would provide an important basis upon which to support this community of practice, and build and maintain conversations to generate a common voice, required to gain further political and financial support.

Outcomes of the workshop:

- Recognition that many arrive at fisheries social science by circuitous routes, bringing a breadth of alternative skills and perspectives;
- Following on from the previous point, the group has the capacity to identify gaps in research from a diverse range of perspectives and angles, enhancing the capacity of connected RACs to be alerted to relevant and impactful domains of future research (see appendix 1-3);
- Participants agreed that the network should continue in some form, with the temporary name, *Social Matters Initiative* (SMI);
- Creation of a shared contact list, including research interest biographies;
- Agreement on the need for enhanced 'visibility' of seafood industry social scientists, to each other, to policy makers, managers, industry and research funders (beyond the FRDC);
- Recognition that social scientists are often unable or reluctant to take 'leadership' roles, and that this must change;
- Agreement on a number of guiding principles that unite the group -'justice'; 'enhanced management outcomes' - without being exclusive of others, including those from other disciplines;
- Establishment of a Steering Committee from all States and the ACT, to develop the goals of the SMI, including:
  - Drafting a journal article;
  - Exploring the feasibility of an edited book;

- Exploring the establishment of a multi-platform digital presence, grounded in a web-site with social media satellites;
- Exploring the potential for future meetings of SMI to be timed to coincide with major Australian and international meetings of fisheries researchers and managers, such as the World Fisheries Congress 2020 in Adelaide.
- Exploring business models for establishing and maintaining a formal network.

A timeline was set for the middle of 2018 for the Steering Committee to report back to the group on their element of responsibility, and on that basis to re-evaluate the feasibility of moving forward and, if so, in which direction. In light of competing commitments this date has been revised back to late 2018 (coinciding with the end of the teaching year).

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### **Abbreviations**

ABARES	Australian Bureau of Agricultural and Resource Economics and Sciences
ARC	Australian Research Council
CSIRO	Commonwealth Scientific and Industrial Research Organisation
EBFM	Ecosystem-based Fisheries Management
FRDC	Fisheries Research and Development Corporation
IMAS	Institute of Marine and Antarctic Studies (University of Tasmania)
SMI	Social Matters Initiative
SSRCP	Social Research Coordination Program
TBTI	Too Big Too Ignore

### **Executive Summary**

The project brought together Australian seafood industry social scientists for the first time ever in a specific and dedicated meeting, to discuss our identity, our role in governance, our past and our future. The *Social Matters* workshop ran over two days and involved 20 scholars, researchers and



practitioners from around the country. The workshop also included one prominent international network actor and scholar who provided expert global perspective and strategic network-building advice.

The objectives outlined in the project application were as follows:

- To workshop and build upon the thematically documented FRDC audit of Social Science research (FRDC2009/317);
- To workshop and thematically document current and ongoing research activities and drivers of participants. They key to this objective is the identification of research-setting processes, and the ways in which social



scientists perceive gaps in knowledge and how this might be better aligned with the voices of industry;

 Updated themes, key gaps and emerging issues (from 2009/317) that can be drawn upon by RACs in the immediate future;

- 4. Sharing of knowledge regarding emerging methodologies to maximise contributions of the social scientists to the investigations of identified challenges and research pathways;
- 5. Improved connections between social scientists and a fostering of a coherent voice for social science research in Australia which can be drawn upon to respond collectively to the industry's needs to address emerging issues.

### **Results/key findings**

#### Shared vision:

The workshop produced agreement on the shared goal to grow the visibility and influence of seafood industry social science in Australia through more structured collaborative efforts. While the exact form and label of the network



was not settled upon, there was agreement to continue the discussions under the 'place-holder' title of the Social Matters Initiative (SMI).

#### Mendeley library:

The project collated references to social science research from the past ten years, increasing the 2009 database from 163 to 315 (both academic and grey literature). The reference list is included in Appendix 4 as at the time of report submission.

#### DropBox:

A group DropBox was created for the sharing of researcher information and contact details, relevant literature (particularly grey literature), conference information (who is attending what, where and when?), and group activities (see below).

#### **Steering Committee:**

A Steering Committee was established to develop several key initiatives of the SMI (see below), with plans to reconvene towards the end of 2018 (after the teaching year).



#### **Research gaps:**

A number of attempts were made to identify key themes and gaps in current and future social science research. Given the diversity of the group – a strength – this was a challenging process. See Appendix's 1-3 for some insight into the kinds of issues discussed. It should be noted that a more 'conversational' approach could be implemented, through (for example), an annual meeting of RACs and attending researchers (and industry members), at each Seafood Directions conference.



Implications for relevant stakeholders

The implications of the workshop include:

- Access for industry, including RACs and FRDC HDR, other researchers and managers to a list of key Australian seafood industry social scientists, their contact details, publications and reports, and current research focus;
- 2. More fluid sharing of information and resources among social scientists, including methodological developments and insights into enhancing the incorporation of findings into governance structures. The building of these information sharing channels facilitates a more agile and responsive research community who can build on (rather than replicate) each others' work, to the benefit of the industry and the FRDC Human Dimensions RD&E goals;
- 3. A focus on raising the profile of social sciences input at the front end of decision making and the need to identify a number of champions across the country who are well placed to speak on behalf the discipline/s and connect industry/government with research and researchers.



#### Recommendations

- It is recommended that the actions identified in Table 1 (see below) be progressed through identified working groups of the *Social Matters Initiative*, with relevant assistance from the FRDC Human Dimensions subprogram.
- 2. A small grant from FRDC sought to complete a comprehensive update of the Australian social science literature (including summaries), in line with the original Clarke report, which will assist with production of a journal article that comprehensively captures the Australian sector.
- 3. The SMI seeks the support of FRDC in establishing a social sciences session to be included in the forthcoming Seafood Directions 2019 in Melbourne, with a focus on the attendance of RAC members and the progression of effective communication both among researchers, and between researchers and industry stakeholders. Developing better communication between RACs and researchers via an annual meeting (at Seafood Directions) could build the capacity of the research community to identify and deliver research relevant to the RACs.
- 4. It is also recommended that FRDC be consulted on the options for hosting a website of the
  - Social Matters Initiative, with the objective of creating a platform to share research papers, bibliographic data and research challenges facing the industry for forum discussion.



#### **Keywords**

Social science; visibility; network; Social Matters Initiative; industry viability; governance.

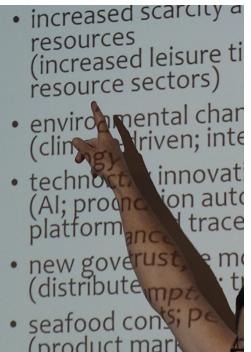
# Report

### Background

Social science research into the seafood industry has a history of around 60 years in much of the developed world (Acheson 1981; Barth 1966). These studies draw attention to the way that



socially-embedded—human—decision making can influence catch-and-effort patterns. There has been a growing recognition of the role of social science in understanding what people do, from why fishers choose to remain in a fishery when it makes economic sense to leave, to how public perception and 'social licence' impacts on fisheries policy, to the challenges of negotiating access rights among diverse stakeholders. While economics as one of the social sciences disciplines has a profile in the management of fisheries, sociologists, anthropologists, historians, human geographers and political ecologists (among others), have also made significant contributions to the recognition of the fact that the only way humans can hope to influence the sustainability of the seafood industry and the marine environment as a seafood



habitat, (and by association, fish stocks, markets, consumption patterns, procurement methods and rates) is by regulating the actions of other humans.

In the past, there has been a tendency for social science to be reactive to issues in fisheries governance, to autopsy a crisis after it has happened, or to be invited to make sense of a problem after it has emerged. One of the key gaps in the design of social science research is the capacity to anticipate issues and design responses that can enhance the adaptability of the

industry, both socially and economically. In order to do so practitioners within the discipline needs to be communicating effectively with each other in regards to best-practice methodologies, both for working effectively with industry and particularly with fisheries managers and policy makers.

There is a need for social scientists to increase their visibility in governance contexts and to play a more active role in up front decision-making, rather than a post facto explanatory role. This is necessary both in order to avoid preventable problems before they occur as well as to enhance the industry's resilience through the application of innovative and socially appropriate governance strategies.

There is also a need to situate Australian research within a global context that anticipates and speaks to international imperatives, challenges and frameworks (e.g. FAO Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Poverty Eradication). In the Australian context, the issues that the workshop aimed to engage with included; sharing the fish (resource sharing, property rights, global food security);

adaptability (fishing as livelihood, practice, culture, in a climate of rapid change and need for adaptation and innovation); research practice, data and decision support (how can social dimensions be monitored and incorporated more formally into decision making?; what innovations in social science practise are needed?).



#### Aims

The key aim of the project was to initiate a network of information-sharing and support for Australian fisheries social scientists. As a component of this objective, the *Social Matters* workshop aimed to, first, articulate and, then, identify strategies to raise the profile of social scientists. Increasing the visibility and credibility of social science through a more unified, or networked,

presentation, was agreed as necessary in being able to increase the value proposition of the social sciences in fisheries governance planning, and ultimately more 'just' outcomes for stakeholders.

#### 2009 Research Audit

In 2009, the Social Research Coordination Program (SSRCP) of the FRDC funded a project, *Research audit of social sciences fisheries research* (Clarke 2010), led by Dr Beverley Clarke. The project audited all social science research conducted on Australian fisheries and aquaculture between 1995 and 2009. The objectives of this project were (Clarke 2010:i):

 To improve understanding, by way of a research audit, about the research that has been conducted into the social aspects of NRM with regard to fishing and aquaculture industries. 2. To assist in the development of targeted future research effort.

The SSRCP identified five research themes to help organise the audit (Clarke 2010:2):

- Integrated decision making (integration of both the economic realities and social values in the context of ecological drivers to provide a triple bottom line basis for management decisions)
- 2. Social carrying capacity (capacity of civil society to accept and incorporate greater
  - levels of fishery activity both aquaculture and wildcatch. How is this assessed
    and can it be increased?)
- Adoption and Adaptation identification and support of the ability to adapt to new circumstances and



adopt innovations, technologies, business frameworks.

- 4. Identifying and translating social values: identifying and articulating the social values and impacts around fishing and interpreting these in the context of fisheries management and policy.
- 5. Industry characteristics: characteristics of both sectors of the industry and the supporting regional communities are articulated and explored for strengths and weaknesses.

For the period 1995-2009 the audit identified 163 items, broken down as follows (Clarke 2010:6):

Number of items published	
1995-1999	19
2000-2004	57
2005-2009	87
2010	1
Geographical spread	
National	47
Queensland	28
New South Wales	17
Tasmania	14
South Australia	11
Victoria	10
Western Australia	7
Northern Territory	4
'Southern Australia'	1
'Southeast Australia'	3
'Eastern Australia'	1
'Northern Australia'	5
Marine planning regions	
East marine planning region	4
Northern marine region	4

South east marine region	4
South west marine region	1
Research design	
Conceptual (theory and model making) 9	9
Empirical (case studies, focus groups, qualitative and quantitative	68
surveys)	
Applied (evaluation, risk assessment, models)	29
Applications	
Frameworks/toolkits/guides	24
Models	14
Indigenous focus	29
Agency research or agency supported research	56

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The five research themes identified yielded the following results in the audit, and elicited a number of sub-themes in two of the original categories:

Theme	Research	Identified sub-themes
	items	
Integrated decision	27	
making		
Social carrying capacity	31	

<sup>&</sup>lt;sup>1</sup> Clarke (2010:11) includes three papers as an indication of the kinds of work being done in the general field of social carrying capacity, noting that there were no resources that directly addressed the issue.

Adoption and	58	Frameworks to support the ability to adapt to new	
Adaptation		circumstances	
		Governance, Strategic Policies and strategies	
		a) Governance	
		b) Strategic Policies and strategies	
		Tools/Models/Techniques	
		a) Zoning	
		b) Instructive print information (maps, report	
		cards, handbooks)	
		c) Environmental Management Systems (EMS)	
		d) Risk Assessment	
		e) Modelling	
		f) Incentive instruments	
Identifying and	53	Understanding importance of social values	
translating social values			
		Community Perceptions of Fishing	
		Indigenous perspectives	
		Social Impact Assessments	
		Recognising local values in research and management	
Industry characteristics	24	Recreational Fishing Effort	
		Characterising and assessing indigenous fishing effort	
		Analysis and assessment of the socio-economic	
		situation of commercial enterprises and their	
		associated communities	

Several key gaps were identified within the audit, particularly in relation to the first two themes, and a range of suggestions made for future research.



Since 2009, the contributions of social scientists to the pool of research have increased significantly. The reasons for this are numerous, intersecting, and complex. Potentially the most significant of these is that the FRDC now has a dedicated Human

Dimensions research subprogram which focuses on concerns around the people of the industry, and understanding their challenges, strengths and opportunities in the context of industry management and environmental pressures. More PhD candidates have graduated and some scholars relocated to Australia, resulting in some growth in the sector. Shifts in public and political sentiment, as well as key events, have also brought the relevance of social science perspectives on the seafood industry into sharper focus.

Take, for example, the public, political and legal events surrounding the attempt to introduce the so-called 'super trawler' the FV Margiris to Australian waters to fish in an output-controlled fishery. While compliant with the legal interpretation of statues and policies on fisheries management, the arrival of the Margiris was met with vocal opposition from significant sections of the Australian public. Indeed, such was the subjective, social disapproval of the super trawler and the public campaigning against its use in Australian waters that the legal framework had to be changed in order to prevent its legal operation. This case demonstrates that social matters, matter, and that they matter to businesses, managers, the environment, communities and to the legal basis of Australian seafood industry governance. Further to this, there is also increasing recognition through efforts in the area of EBFM and triple bottom line governance that the environment, or an industry cannot be managed in isolation of their economic and social impacts, values and benefits. New South Wales with its ambitious whole of Marine Estate Management plan is an example of efforts to move in a direction of proactive holistic management. These are examples whereby the integration of social sciences disciplines early in these planning, discovery and implementation process can be proactive and positive in identifying, understanding and heading-off potential conflicts and challenges, ultimately smoothing governance and implementation processes through increased efficiencies in the long term.

Given the growing importance of social science research in the marine management and Australian seafood industry—or, more accurately, broader recognition of its relevance—there's a need to consolidate what we have done in the past, to consider the current situation, and to look to the future. With that broad framework in mind, the need was identified for a gathering of key Australian maritime social scientists, an event that forms the central activity of this project.

#### **Objectives**

The aims of the project were:

- To workshop and build upon the thematically documented FRDC audit of Social Science research (FRDC2009/317);
- 2. To workshop and thematically document current and ongoing research activities and drivers of participants. They key to this objective is the identification of research-setting processes, and the ways in which social scientists perceive gaps in knowledge and how this might be better aligned with the voices of industry;

- Updated themes, key gaps and emerging issues (from 2009/317) that can be drawn upon by RACs in the immediate future;
- 4. Sharing of knowledge regarding emerging methodologies to maximise contributions of the social scientists to the investigations of identified challenges and research pathways;
- Improved connections between social scientists and a fostering of a coherent voice for social science research in Australia which can be drawn upon to respond collectively to the industry's needs to address emerging issues.

#### Method

The method used in this project centred on a two day workshop of key social scientists investigating the Australian seafood sector in Australia. The workshop was held at Deakin Downtown, the Deakin University corporate meeting venue, in central Melbourne, on the 19<sup>th</sup> and 20<sup>th</sup> February, 2018.

The project was organised by the project investigators, with Brooks taking on a paid administrative role in the planning stages of the project. Emily Ogier of FRDC's HDR Subprogram was crucial to the design of the workshop invite-list and agenda. Deakin University provided the venue and other in-kind contributions (e.g. travel bookings), in order to facilitate the event.

#### Determining the invite list

The aim was to host a workshop of around 20 people, as this was the number felt to be both large enough to generate adequate discussion and provide a breadth of perspectives, while not being too many to convene and moderate.

As the core of the funding for the project was to be spent on facilitating attendance at the workshop—economy airfares and accommodation for one night—keeping the attendance list to around 20 was also necessary for budgeting purposes. Those invited had both:

- a strong track record in Australian fisheries research or research relevant to Australian fisheries, and
- an intention to continue researching on Australian fisheries into the foreseeable future.

Invitees were determined by Brooks, King and Ogier, based on their broad knowledge of the social science seafood community, with oversight and input from the FRDC HDR program. An effort was made to include participants from a range of institutions and organisations, as well as to achieve national coverage.

It was lamented that there was not enough scope to invite emerging scholars and practitioners (e.g. those still undergoing doctoral studies). However, it should be noted that the development of the entire maritime social science sector was—and remains—front-of-mind in the design of this project as a long-term endeavour; it is anticipated that this project will be a springboard from which broader and more expansive discussions about the field will emerge and progress.

The classification of economics as a social science was considered during the development of the invite-list. Indeed, the role of economics as a social science in fisheries management emerged as a key theme in discussions during the workshop, and will be described, below. It is suffice to note that economics has a well-established history of significant influence in fisheries governance, both in Australia and globally. The anthropologist, James McGoodwin (1990:73), describes the happy marriage between economics and fisheries management:

When fisheries managers extended their attention beyond the biological aspects of managing the fisheries, it was natural that the discipline of economics captured their

attention. After all, Maiolo and Orbach note, 'Economics has a language, a method and, for many, a track record that are more impressive to the nonsocial scientist than sociology, anthropology or other social science disciplines'.

In light of Objective 4 of the Social Matters project—to enhance the contribution of social sciences to relevant fisheries issues—it is fair to say that the goal of the workshop was to raise the profile and influence of social sciences *beyond* that of economics. As such, the decision was made to invite only those economists whose work encompassed a focus on understanding social quandaries, in preference or addition to enhancing biological insights into fisheries management.

#### International perspective

As part of the workshop, an invitation was extended to Professor Ratana Chuenpagdee, leader of the large international small-scale fisheries project, *Too Big To Ignore*, and Canada Research Chair in Natural Resource Sustainability and Community Development, Memorial University,



Newfoundland. Given Professor Chuenpagdee's position at the core of an international network of social scientists (among others) involved in fisheries research, she was invited to help situate Australian issues and concerns in a global context, as well as to strengthen connections between the international network and the Australian cohort. Further, the model of the *Too Big To Ignore* project offered a model of network, capacity and profile building that was seen to be of benefit to the burgeoning Australian network.

Participants in the workshop are in Appendix 5.

#### Agenda

The agenda for the workshop shifted significantly in response to discussion, particularly on day 2 of the workshop. The original agenda is provided in Appendix 6. Overall, the agenda served to provide a platform to introduce and establish areas of common interest and values in research and approaches, given that while these researchers were all aware of each other, most had not ever had the opportunity to meet face to face. As the basis of this, day one was focussed on reviewing a coming to a common understanding of what had been achieved through the contributions of social sciences in the last 20 years, and the current and future focus and governance arrangements of the FRDC HDR as one of the sectors key protagonists of fisheries social sciences research.

While the second day of the workshop had originally been envisaged to be one of a focus on emerging issues, the challenges faced both individually and collectively, of social scientists attempting to move the potential contribution of social sciences up the governance agenda, and that of collaborating across such divergent mind sets as represented by the span of social sciences disciplines, dominated Day 2 of the agenda. While these were originally envisaged as a component of the issues preventing a fulsome contribution of the discipline to marine and fisheries management, the calibre of the challenges was soon realised, and hence took much of the second day's agenda, which was managed accordingly.

#### Facilitation

Tanya King introduced the workshop, Emily Ogier and Kate Brooks led a number of sessions on day one, and Professor Chuenpagdee delivered a session on day one. Facilitation on day two was undertaken by Kate Brooks.

### Results

### **Resources update**

The process of updating the 2009 Social Sciences audit has been initiated with the creation of a shared, online <u>Mendeley</u> library that can be accessed, edited, downloaded and updated by participants. It is anticipated that this library will persist as a 'living' document to be updated by stakeholders as new research emerges. At the time of submitting this report the number of references in the library was over 300.

A Dropbox folder has also been created to deposit—particularly—grey literature (reports and unpublished material) that may be difficult to access via library databases.

### **Working Group**

A Working Group was established to progress a number of initiatives raised at the workshop (and outlined further, below).

Working Group name	Members	Activity
Journal article	Andrew Song	Draft an article about
	Leah Burns	Australian seafood industry
		social science, with the
	Mike Fabinyi	intention of input from the
		rest of the group, and
		drawing inspiration from a
		number of documents (refs).

Edited book	Jacki Schirmer	Explore the market for an
	Kate Brooks	edited book.
Web presence	Tanya King	Explore the possibilities for
		hosting an online presence
		for the Social Matters
		Initiative, with a range of
		related components such as
		Twitter and Instagram, a
		document housing
		component, etc.
Business models	Social Sciences Network like	Explore options for funding
	AMSA - joining into their	the group into the future.
	group as a subset?	
Conference participation	AMSA	Emily Ogier to raise
	Seafood Directions with a	possibility.
	specific session devoted to	
	the latest research and	
	outcomes of SS research	
	starting from 2019	

#### Themes and issues raised and discussed during workshop

# Recognition that many arrive at fisheries social science by circuitous routes, bringing a breadth of alternative skills and perspectives;

At the beginning of the workshop participants were invited to reflect on their research agendasetting process, or how they arrived at their particular research interest. What became apparent in that discussion that Australian seafood industry social scientists arrive at their research via a range of professional and personal paths. This means that within the community are a range of skill-sets and perspectives beyond that developed during a social science education. Andrew Song, for example, is a trained engineer. Kate Barclay studied Japanese, which is partially what let her to work in Asian fisheries. Michelle Voyer was trained as a biological scientist and used to be "one of those people who was yelled at a lot by industry" (a fisheries manager), before making the move to social science. Kate Brooks had a long career as a marketing executive before turning her attention to sociology research and fisheries in particular.

One of the drawbacks of such circuitous routes to social science was the potential for researchers to feel underqualified, or even fraudulent in their claims to social science expertise, rather than focus on their ability to enhance their social sciences experience with other disciplinary insights. This reluctance to step forward with confidence in their research was felt to undermine social scientists' willingness to take leadership roles in relation to fisheries governance.

Overall, however, rather than being a negative feature, participants commented on the breadth of insight generated by such diverse backgrounds, and the extended networks that could be accessed via their integration into social science activity. It was agreed that future articulations of social science should champion the diversity of the sector as a strength, rather than ignore it, perceiving it as a weakness.

# Participants agreed that the network should continue in some form, with the temporary name, *Social Matters Initiative* (SMI);

It was agreed that improving the ways in which social scientists are recognised was a valuable endeavour and should be progressed. It was decided to reflect the title of the workshop and to continue activities of the group under the title, *Social Matters Initiative*, with the proviso that the term is only a 'place-holder' term for further discussion, rather than a clearly defined group to emerge from the workshop.

#### Creation of a shared contact list, including research interest biographies;

See Appendix 5 for a list of workshop participants, contact email, twitter handle, and biography. No participant did not wish to be involved in the discussions moving forward.

Invited social scientists who were not able to attend the workshop expressed their desire to be involved in these discussions also. After the workshop, this list—contained in Dropbox—will be made available more widely in order to expand the network, and social scientists will be encouraged to add their details to the database.

# Agreement on the need for enhanced 'visibility' of seafood industry social scientists, to each other; to policy makers; managers; industry, and research funders (beyond the FRDC);

A considerable amount of discussion was dedicated to the goal of the workshop and the need for enhanced 'visibility'. Social scientists, by their nature, tend to have strong connections to industry members and communities. There was a comment lament, however, that social science tended to be relatively invisible at the policy-making, political and management level. Social science 'components' tended to be 'tacked on' to other 'more serious' or 'more weighty' projects focussing on biological science (for example). As such, social science insights tended to be framed by the paradigms of other disciplines, undermining their potency, visibility and uptake.

Part of the issue was that social scientists and biological scientists and managers tended to work from a set of assumptions, and with a language, that was at odds. Comment was made that while the recent push for enhanced 'science communication' targeted the need for 'hard' sciences to present their findings in an accessible manner, social scientists tended not to see their presentation-style as potentially in need of such attention. It was noted that if social scientists feel they are not being 'heard' or 'seen', then it may be necessary to look at modifying our communication to better suit our desired audience (governance personnel as well as industry).

On this point it was noted that much could be learned from the economics branch of social science, which has a language much more suited to fisheries management than other social sciences (see McGoodwin 1990, above). The outcomes of economic research are, by nature, quantifiable, and therefore speak to a style of management in which measurement is central.

# Recognition that social scientists are often unable or reluctant to take 'leadership' roles, and that this must change;

One of the points discussed was the reluctance of many social scientists to take up leadership roles, either on grant applications, boards, or other governance committees. This was partly attributed to systemic issues, and partly to social scientists' awareness of their alignment either with either industry (as opposed to management) or as neutral observers (rather than as active stakeholders in favour of any one perspective), or a combination of both. There was a general agreement that social scientists needed to be able to become comfortable with bringing either disclosure or objectivity to these roles and 'stepping up' to the plate, to nominate and agitate

for such positions of influence. Further discussion within the discipline is required to assist social scientists in navigating these ideological dilemmas and challenges.

This challenge was faced by social scientists in the United States in the 1990s, and Australian scholars could benefit from lessons learned by key social science practitioners who managed to make a significant place for their ideas within management. Hosting someone with demonstrated expertise in bridging the divide between social science and policy decision-making (for example, at a Seafood Directions conference) would benefit Australian practitioners seeking to do the same.

#### Build the field;

There was recognition from the group that in order to achieve management recognition and involvement, we must demonstrate our capacity for high quality research, build our profile and become more 'visible'. We must do so in a way that is understandable to the existing management framework and the communities with whom we work, without losing the disciplinary insights, frameworks and approaches that connect us to.

#### Diversify funding models;

FRDC is a key source of funding for many social scientists, along with others working with the seafood industry. There was recognition that in order to enhance the profile of social sciences, undertake research with a broad range of purposes and outcomes, and to increase the profile of our research both within the seafood sector and beyond, additional sources of funding should be sought. Targeting funders such as the Australian Research Council (ARC) was discussed, however further focussed discussion is required to develop and progress an approach to address this.

#### Champions;

There was recognition that social scientists are not occupying many leadership roles, particularly in large and cross-disciplinary research projects and programs. Leaders and opportunities for leadership are emerging, however, but it was recognised that as a community of practitioners within this discipline, we need to identify how we can capitalise on, grow and celebrate leadership actions by individuals within the system. This is in order to maximise social science research's contribution to the industry. It is important to understand the journey of emerging leaders and what can we learn from them about what we need to do to make the next step to leadership.

# There is a marked need for social science to play a greater role in the anticipation of challenges and opportunities in the seafood sector;

It is often recognised that social science can contribute to management decisions impacting the industry before they present a point of 'crisis'. However, while the role of social science has, in the past, been characterised as being 'post-facto' social science (that 'autopsies' of events), it was recognised that there is a need for leaders in this space. Specifically this concerned social scientists having a seat at the decision making table, early in processes to assist in identifying the full complexity of industry challenges and hence research questions, in advance of a crises. This workshop represented a move towards the development of more professional and more visible Australian seafood industry social science community, that can engender confidence in calling social sciences to participate in early problem analysis and research decision making. While social scientists are relegated to a post nominal role in problem analysis and investigation they will continue to be forced into generating post facto analysis, and minimal contributions

to the avoidance of issues or optimisation of the health, resilience and sustainability of the seafood industry.

A key realisation to emerge from the workshop was that the group is characterised by diversity; diversity of motivation, identity, capacity and focus. Social scientists work with a range of different people and communities, and in dynamic social, economic and environmental contexts, so it should come as no surprise that it is challenging to define 'who we are and what we do'. It is not impossible, of course, and the following themes or terms repeatedly emerged throughout the workshop, around which many in the group, could generally cohere.

# Agreement on a number of guiding principles that unite the group without being exclusive of others, including those from other disciplines;

#### Justice

The term 'justice' was mentioned repeatedly in relation to the outcomes researchers sought from their work. The term was used in a general sense and did not refer to a particular group or entity (e.g. 'currently licenced commercial fishers' or 'the environment'), or to a specific outcome (e.g. 'keep all currently licenced commercial fishers in business' or 'make the environment as pristine as possible'). Rather, as noted by those whose research specialises in understanding how notions of 'fairness' are determined (Blader and Tyler 2003; Sweeney and McFarlin 1993; Van den Bos et al. 1997), what is 'just' depends on a great range of factors and can change depending on a raft of mitigating events, considerations and circumstances. One suggestion from the workshop was that 'transparency' was the key component of justice.

Our objective is to help question where, what and why they are doing what they do; and identify who benefits and who doesn't as a result. Including understanding whose values are driving decisions? Why? And what are the consequences of that for different groups?

#### **Better outcomes**

One recognition made by the group was that many of the problems faced by the seafood industry emerge from social issues, including environmental failures. A key goal for those at the workshop was to improve the social outcomes for seafood industry stakeholders (without compromising environmental standards). This principle was related to the sense that social scientists tended to be engaged (by managers, policymakers and industry) only when there was a crisis or a problem to be solved. Workshop participants felt that if social science insights were incorporated into the planning phases of decision-making—rather than being 'tacked on' to the end, or in response to a resulting social crisis or failure—that such crises could be better anticipated and perhaps avoided, or at the least, effects mitigated to greater degrees than are currently achieved.

### To support environmental sustainability

Our objectives are to identify how to encourage the behaviours, processes, governance (social behaviours and social systems) that are successful in achieving ecologically sustainable use.

# *To support quality of life, wellbeing (understanding and managing social impacts during change)*

Our objectives are to increase understandings about how we ensure that engaging in freshwater and marine activities such as fishing is not detrimental to (and ideally supportive of) quality of life, health, wellbeing of all the people, businesses/industry, and communities involved? How do we help people cope with change, build resilience to change, adapt successfully to change?

It is important to underline that this does not mean maintaining the status quo – and that hard decisions need to be made. Social Scientists can provide support for making appropriate decisions, without failing to support what is needed for long-term sustainability, due to potential short-term impacts (to give one example).

### Finding common values (understanding differences, challenging them)

Social sciences are underpinned by understanding conflicting values, questioning differences, challenging, and finding commonalities that can aid identifying mediating pathways. Challenging received wisdom of all kinds, understanding the values underpinning it and unpacking that so people can find commonality is essential to robust social sciences. Including biophysical science.

### Progressing social science theory, methods, processes.

Utilising our curiosity - that thing that makes us do what we do!

### Keeping conservationist messages 'honest'

While social scientists do not have a monopoly on truth, the benefit that the social sciences can bring is to clarify and explicate whose 'truth' is being used, and how it

relates to those of others to find common ground and the be able to open pathways to positive conversations and potential collaboration.

### What we don't do!!

Unquestioningly support a questionable agenda (e.g. use social science to design propaganda aimed and encouraging unthinking acceptance of a particular practice).

## Implications

Assessment of the impact of the outcomes on end users such as management, industry, consumers, etc. in Australia (where possible provide a statement of costs and benefits).

The workshop had the very beneficial effect of further clarifying and reinforcing in all attendee's minds of the contributions that social sciences can make to the seafood industry.

The discussions undertaken, identified the prescient need for increased collaboration between social scientists (of all disciplines) to share knowledge and networks and collaborate in raising the profile of the potential that social scientists offer in identifying and clarifying research issues of future concern to the industry and government.

Several actions are required to both equip and facilitate social scientists working in the field of fisheries industry and management, to be able to position their capacity, and to step up and demand a seat at decision making tables in order to optimise the benefits that the industry can gain from the social sciences. These actions include:

Action	Benefit achieved
1. Establishment of an ongoing network	Increased knowledge and awareness of work,
of communication	resources and opportunities to position social
	sciences to benefit the seafood industry.
2. Identify potential research themes for	Broad themes aligned with the objectives of
cross collaboration (See Appendix 1)	funding bodies such as FRDC facilitate
	greater understanding and focus of key areas

Table 1:	Implication	Actions
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<ul> <li>of future benefit to the industry and its management (See Appendix 2)</li> <li>Clarity provided to research organisations such as FRDC as to the insights to specific industry related problems that SS can generate;</li> <li>Social Scientists can respond collectively to the industry's needs to address emerging issues, and increasing the pool of resources available to the industry.</li> <li>Generate Social network and discourse analysis to understand who we as social scientists need to be talking to gain engagement and places at the decision-making tables.</li> <li>Identify emerging mega trends in the Highlight for industry issues that will need</li> </ul>		of investigation of greatest benefit to the
<ul> <li>of future benefit to the industry and its management (See Appendix 2)</li> <li>Clarity provided to research organisations such as FRDC as to the insights to specific industry related problems that SS can generate;</li> <li>Social Scientists can respond collectively to the industry's needs to address emerging issues, and increasing the pool of resources available to the industry.</li> <li>Generate Social network and discourse analysis to understand who we as social scientists need to be talking to gain engagement and places at the decision-making tables.</li> <li>Identify emerging mega trends in the Highlight for industry issues that will need</li> </ul>		industry from SS research.
management (See Appendix 2)       Clarity provided to research organisations such as FRDC as to the insights to specific industry related problems that SS can generate;         Social Scientists can respond collectively to the industry's needs to address emerging issues, and increasing the pool of resources available to the industry.         4. Generate Social network and discourse analysis to understand who we as social scientists need to be talking to gain engagement and places at the decision-making tables.       Greater clarity as to the social capital gaps in the Social sciences better to make a positive contribution to the industry.         5. Identify emerging mega trends in the       Highlight for industry issues that will need	3. Identify emerging research questions	Social scientists adopt a proactive rather than
<ul> <li>Clarity provided to research organisations such as FRDC as to the insights to specific industry related problems that SS can generate;</li> <li>Social Scientists can respond collectively to the industry's needs to address emerging issues, and increasing the pool of resources available to the industry.</li> <li>4. Generate Social network and discourse analysis to understand who we as social scientists need to be talking to gain engagement and places at the decision-making tables.</li> <li>5. Identify emerging mega trends in the Highlight for industry issues that will need</li> </ul>	of future benefit to the industry and its	reactive position in relation to research calls;
<ul> <li>industry related problems that SS can generate;</li> <li>Social Scientists can respond collectively to the industry's needs to address emerging issues, and increasing the pool of resources available to the industry.</li> <li>Generate Social network and discourse analysis to understand who we as social scientists need to be talking to gain engagement and places at the decision-making tables.</li> <li>Identify emerging mega trends in the Highlight for industry issues that will need</li> </ul>	management (See Appendix 2)	Clarity provided to research organisations
generate;         Social Scientists can respond collectively to the industry's needs to address emerging issues, and increasing the pool of resources available to the industry.         4. Generate Social network and discourse analysis to understand who we as social scientists need to be talking to gain engagement and places at the decision-making tables.       Greater clarity as to the social capital gaps in the Social sciences network that can be filled to position social sciences better to make a positive contribution to the industry.         5. Identify emerging mega trends in the       Highlight for industry issues that will need		such as FRDC as to the insights to specific
<ul> <li>Social Scientists can respond collectively to the industry's needs to address emerging issues, and increasing the pool of resources available to the industry.</li> <li>Generate Social network and discourse analysis to understand who we as social scientists need to be talking to gain engagement and places at the decision-making tables.</li> <li>Identify emerging mega trends in the Highlight for industry issues that will need</li> </ul>		industry related problems that SS can
<ul> <li>the industry's needs to address emerging issues, and increasing the pool of resources available to the industry.</li> <li>4. Generate Social network and discourse analysis to understand who we as social scientists need to be talking to gain engagement and places at the decision-making tables.</li> <li>5. Identify emerging mega trends in the Highlight for industry issues that will need</li> </ul>		generate;
<ul> <li>4. Generate Social network and discourse analysis to understand who we as social scientists need to be talking to gain engagement and places at the decision-making tables.</li> <li>5. Identify emerging mega trends in the Highlight for industry issues that will need</li> </ul>		Social Scientists can respond collectively to
4. Generate Social network and discourse analysis to understand who we as social scientists need to be talking to gain engagement and places at the decision-making tables.       Greater clarity as to the social capital gaps in the Social sciences network that can be filled to position social sciences better to make a positive contribution to the industry.         5. Identify emerging mega trends in the       Highlight for industry issues that will need		the industry's needs to address emerging
<ul> <li>4. Generate Social network and Greater clarity as to the social capital gaps in discourse analysis to understand who we as social scientists need to be to position social sciences better to make a talking to gain engagement and places at the decision-making tables.</li> <li>5. Identify emerging mega trends in the Highlight for industry issues that will need</li> </ul>		issues, and increasing the pool of resources
discourse analysis to understand who       the Social sciences network that can be filled         we as social scientists need to be       to position social sciences better to make a         talking to gain engagement and places       positive contribution to the industry.         at the decision-making tables.       Highlight for industry issues that will need		available to the industry.
<ul> <li>we as social scientists need to be to position social sciences better to make a talking to gain engagement and places at the decision-making tables.</li> <li>5. Identify emerging mega trends in the Highlight for industry issues that will need</li> </ul>	4. Generate Social network and	Greater clarity as to the social capital gaps in
talking to gain engagement and places       positive contribution to the industry.         at the decision-making tables.       5. Identify emerging mega trends in the         Highlight for industry issues that will need	discourse analysis to understand who	the Social sciences network that can be filled
at the decision-making tables.         5. Identify emerging mega trends in the	we as social scientists need to be	to position social sciences better to make a
5. Identify emerging mega trends in the Highlight for industry issues that will need	talking to gain engagement and places	positive contribution to the industry.
	at the decision-making tables.	
industry where social sciences can attention and work in advance of crises or	5. Identify emerging mega trends in the	Highlight for industry issues that will need
	industry where social sciences can	attention and work in advance of crises or
contribute (See Appendix 3) issues being realised.	contribute (See Appendix 3)	issues being realised.

6. Establish a session at Seafood	This will allow sharing of new approaches
Directions focussed on the use of	and research amongst researchers to leverage
social sciences in the seafood	knowledge.
industry.	It will provide the opportunity for those non- social scientists interested to learn more to do. It will get social scientists to Seafood Directions and provide the networking opportunities to build their social capital with the industry, and increase the exposure of
	them and what they have to offer to decision
	makers.
7. Explore the feasibility of establishing	• Raise profile to go to for expert/disciplinary
an association of Social Scientists in	advice
the fisheries industry (i.e. wild catch	•Create community of practice – bring
and aquaculture)	people together, encourage dialogue and practice
	• Interdisciplinary, not discipline specific
	• Improve quality of practice - reduce the
	incidence of bad social science and increase
	incidence of good social science
	• Eligibility for membership
	• Foster collaborative endeavour

## Recommendations

The following recommendations are made:

- 1. It is recommended that the actions identified in Table 1 (see below) be progressed through identified working groups of the *Social Matters Initiative*, with relevant assistance from the FRDC Human Dimensions subprogram.
- A small grant from FRDC sought to complete a comprehensive update of the Australian social science literature (including summaries), in line with the original Clarke report, which will assist with production of a journal article that comprehensively captures the Australian sector.
- 3. The SMI seeks the support of FRDC in establishing a social sciences session to be included in the forthcoming Seafood Directions 2019 in Melbourne, with a focus on the attendance of RAC members and the progression of effective communication both among researchers, and between researchers and industry stakeholders. Developing better communication between RACs and researchers via an annual meeting (at Seafood Directions) could build the capacity of the research community to identify and deliver research relevant to the RACs.
- 4. It is also recommended that FRDC be consulted on the options for hosting a website of the *Social Matters Initiative*, with the objective of creating a platform to share research papers, bibliographic data and research challenges facing the industry for forum discussion.

## Conclusion

The future for fisheries social science in Australia is promising, though various challenges stand in the way of researchers, industry and other stakeholders capitalising on this potential. While there is a large amount of talent in the sector, greater communication and collaboration could enhance the identification of key gaps, and refine and improve research design. Communication between researchers themselves would be an advantage, and a significant step has been made in this direction via the Social Matters Initiative workshop, but more can be done to facilitate communication between researchers and industry stakeholders, including members of RACs and government decision makers. Improving the confidence of those in the field to contribute meaningfully and demonstrably to policy formulation and implementation would improve the willingness of social scientists to engage more vocally in such discussions, and increase their capacity to *lead* – not just *contribute to* – interdisciplinary fisheries RD&E initiatives.

### **Further development**

This project has initiated the creation of a number of shared network tools, namely the online Mendeley library and prior to a permanent platform being established, the shared Dropbox for the transferring of information, documents and other data.

Such sharing platforms necessarily require management, and therefore further work is required on the future of the Social Matters Initiative to establish the most appropriate location for such a platform and how it would be resourced.

### **Extension and Adoption**

The project report has been shared with all attendees of the workshop for further input and correction, with a two-week period for comment, to ensure all thoughts generated by the workshop have been captured.

Subsequent to finalisation it will be shared with not only the attendees of the work shop, but also those social scientists unable to attend the workshop, and emerging social scientists in the field of fisheries social sciences research.

As part of the workshop, it was also agreed that a journal paper be generated to discuss the progress of social sciences in Australia to date, and future opportunities for development and more effective contributions to the industry into the future. It was further proposed that this be presented at an appropriate international conference with a view to generating discussion and cross fertilisation of ideas regarding, increasing the profile of social sciences amongst decision makers and generating earlier engagement with the sector by mangers and industry, to optimise contributions of the social sciences disciplines.

As noted earlier a key element of extending these ideas to industry was the proposal to include a session on the contribution of social sciences at the next Seafood Directions conference to be held in Melbourne in 2019.

It was also muted that this initiative could seek a profile within, for example, the Environment and Society theme of The Australian Sociological Association, and the suggestion will be pursued in connection with the annual conference of TASA in December 2018.

The final report will be circulated widely, with particular focus on the RACs, where the identification of key themes and gaps in research will be relevant to upcoming funding discussions. It should be noted, however, that we suggest a more 'conversational' approach to

identifying relevant research gaps in the future, with one possibility being the establishment of an annual meeting of RACs and attending researchers at the Seafood Directions conference.

## **Project coverage**

No media or external coverage was sought for this project as it was not considered appropriate.

Email distribution lists have been collated.

# **Project materials developed**

An updated list of research papers in fisheries social sciences has been generated by the project, which builds on the work undertaken by the FRDC and Beverly Clarke (FRDC 2009/317). See Appendix 4.

No other project materials have been generated from the workshop at this time.

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## **Research Gaps**

A significant amount of time was spent attempting to 'capture' the enormous range of issues of interest to the group. Doing so is a challenging, and ongoing, process. The following three appendixes are based on sketches, notes etc., generated during such attempts, and not group consensus about the most important aspects or challenges of maritime social science. For the sake of clarity and transparency we include these 'notes', but make a distinction with what is provided, above, in 'findings'.

### APPENDIX 1: Suggested research themes

### **Strengthening the Base:**

What options exist for improving economic viability of the seafood industry and increasing their resilience to processes of change?

### **Broadening the Scope:**

What needs to be accounted for and emphasized in order to increase awareness of benefits and impacts of unintended consequences of fisheries and management decisions?

### Enhancing the Stewardship:

What behaviours and incentives play into alternatives for fostering stewardship within fisheries?

### Sharing the Beach & the Fish:

What mechanisms, behaviours and processes are required to secure livelihoods, physical space and rights to fish?

### **Governing the Governance:**

What institutions and principles are suitable for the governance of fisheries?

### **Aquaculture:**

How to obtain and maintain a social licence for inshore aquaculture?

2. What are the safety and social implications of working on deep sea offshore fish farms?

### APPENDIX 2 - Potential social sciences research questions of future benefit to industry:

- 1. Visibility of fishing industry
  - What does the sector need to do to be prepared to engage in the Blue Economy?
  - How can the sector increase visibility among the public?
  - How can we build the capacity of women within the sector, and improve their visibility, give them due recognition?
- 2. How can the viability and values of fisheries and aquaculture be maintained?
- How can fisheries producers best take advantage of new and emerging markets (e.g. Asia). Seafood CRC used to have that role so there is a gap there.
- 4. Why don't production and marketing cooperatives work as well in Australia?
- Marine spatial planning how to manage this process? How to maintain a critical eye also towards this with regard to e.g. the impacts of MSP, the fact that some fishers not keen to do this.
- 6. Can visibility of fishers be used as a 'nudge' for compliance and enforcement, e.g. the default option is that everything is observed.
- 7. The scale and pace of technological change e.g. unmanned vessels, robots etc. Can the industry adapt and are they tuned in to this?

### APPENDIX 3: Emerging Mega Trends

- Increasing scarcity of resources
  - Reduced demand for work therefore increased demand on marine resources for amenity demand
  - Increased interactions with mega fauna whales
  - Technological innovations how enduring are community fisheries and bespoke fisheries going to be in this changing environment.
  - Changes in governance and transnational corporations and the distribution of trust. New governance models
- What is the notion of community? What will be and how will that affect these future changes how will this affect the interpretation of values.
- Drivers of innovation human rights/inequality and health trends and implications
- Seafood consumption other products from the sea
- Population and migration movement of people
- Chemical manufacture of food
- Will recreational amenity mean more or less resource pressure?
- Maritime transition trends from capture fisheries into aquaculture and/or tourism
- Movement of global trade and maritime transport and increased risks of diseases .
- Communication and the role of social media how does the feeding of pre-determined information affect outcomes which narrows people's perspective (distributed trust)

- Ecological knowledge embedded within a number of things but changing how people are collecting and disseminating knowledge in relation to performance and visibility.
- Increased emphasis on spatial boundaries marine spatial planning and increased securitisation of the ocean.
- Food security in the blue economy.
- What changes in terms of who has stakes (public /private) and how will the actors be.
- Implications of changes in legal and other interpretations of the recognition of the nature as a stakeholder.

What's emerging in the scope of themes

- Moral and ethical considerations of the environment and resource. inequity and power dynamics (power/knowledge)
- Stewardship in relation to fishing rights; demonstrating and measuring stewardship; what are the fundamental values inform this.
- Animal welfare and the moral consideration of 'non-human' nature. Comparing ideas about caring for the environment
- Gender and the framing of masculinity and identity.
- Concerns over the use of bycatch to maximise use of marine resources.

Social Benefits and impacts:

- Equity and distributions:
- Understand values, behaviours & characteristics.
- Governance and participants approaches

• Co-management of fisheries with government is the current - rather what would the comanagement model be that will actually work in terms of how much information and delegation of responsibility and power can or needs to be devolved.

Social Acceptability:

- Production and marketing cooperatives in Australia compared to other countries and factors that influence success
- Marine spatial planning how best to implement/adapt/monitor/manage and meditate negative effects/engaging fishers in marine spatial planning.
- Visibility use to as a nudge policy option re compliance; scale and pace of change in the fishery sector (e.g. unmanned fishery vessels at sea) is the industry currently conceptualising or dealing with this?

#### Appendix 4: Updated Social Sciences Research Resource List to 2018

# To add publications, please contact Tanya King: <u>tanya.king@deakin.edu.au</u> for access to the Mendeley library.

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Appendix 5: Attendee list:

Name	Affiliation
Andrew Song	WorldFish; James Cook University
Brian Coffey	RMIT
Emily Ogier	IMAS; UTas; FRDC
Ingrid Van Putten	ABARES
Jacki Schirmer	University of Canberra
Jenny Shaw	Western Australian Marine Science Institution (WAMSI)
Kate Barclay (Day 1)	University of Technology Sydney
Kate Brooks	KAL Analysis Pty Ltd
Kirsten Abernethy (Day 1)	
Georgette Leah Burns	Griffith University
Melissa Nursey-Bray	University of Adelaide
Michelle Voyer	University of Wollongong
Mike Fabinyi	University of Technology Sydney
Nicki Mazur	EnVision Consulting
Nyree Stenekes	ABARES
Ratana Chuanpagdee	Memorial University, Canada
Sarah Jennings	IMAS; UTAS; FRDC
Sevaly Sen	Oceanomics Pty Ltd
Simon Foale (Day 2)	James Cook University
Tanya King	Deakin University

First	Last name	Affiliation	Email	Twitter handle	Biography
name					
Andrew	Song	ARC Centre for Excellence Coral Reef Studies. WorldFish; James Cook University	andrew.song@jcu.edu.au		Interests are in the area of governance and geography of coastal and inland fisheries, with particular reference to a small-scale sector. I study these topics from multiple angles that contribute to theoretical, methodological and policy development. His work focuses on transboundary and multiscalar governance of fisheries where cooperation and institutions are key enabling elements. Previously, he has examined the extent and the effect of (multidimensional) trust and informal communication in enhancing inter-agency collaboration in the Great Lakes fisheries of North America. Currently, he is extending this knowledge into the realm of fisheries and coral reef management in Asia-Pacific, utilising the

				theoretical starting point of the interactive governanceperspective, while methodologically he is interested ifthe design of survey instruments for measuringstakeholders' underlying notions such as valueprinciple and trust using the techniques of pile sort andpsychometric scaleBackground in engineering. Conceptualising valueandhowhttps://www.coralcoe.org.au/person/andrew-song
Brian	Coffey	RMIT	brian.coffey@rmit.edu.au	Brian has a PhD in Policy Studies (2010), and h research interests centre on the policy and governance dimensions of sustainability (in particular how th environment is conceptualised in policy and th implications this has for how it is governed) an science- policy relations.

Emily	Ogier	IMAS;	Emily.Ogier@utas.edu.au	Geographer 'by trade' but now a 'social scientist' at
		UTAS;		IMAS. Merged into environmental studies and did PhD
		FRDC		in marine and coastal resources impacts of management
				- multi actor governance and conflict over natural
				resources. Discovered fisheries on the Abrolhos Islands
				- common pool dilemma of fisheries is what fascinates
				her. As a 'fish-wife' lives and breathes the issues of
				fishing. Witnessing a demographic cohort livelihood
				shift. Worked in TSIC for a while and then jumped
				back into the research field and in an interdisciplinary
				context. Common pool resources and public interest are
				the key elements that drives her research interests.
Ingrid	Van Putten	CSIRO	ingrid.vanputten@csiro.au	CSIRO Economist. Looking at illegal supply chains in
				Papua New Guinea and resilience of Supply chains.
				Resource allocation in the Torres strait. Effect of
				diseases on aquaculture. Looking at governance. Socio-
				economic indicators. Work for IMBA which sets out a

				science plan - gives a concept about what research is
				important at the time - and uses that to shape her
				decisions about what research to do.
Jacki	Schirmer	University	Jacki.Schirmer@canberra.edu.a	Sociologist. Conflict over natural resource
		of Canberra	u	management and the impacts of changes in resource
				management along with the design of policies to reduce
				the impacts. Interested in going back and understanding
				the actual effect of impacts to inform future work.
				Interested in the nature connection with well-being and
				how that should affect NRM decisions.
Jenny	Shaw		Jenny.SHAW@dmirs.wa.gov.au	From Perth. Comes from a background in fisheries
				sciences. Industry, education, fisheries management
				and policy. After a stint overseas came back to fisheries
				management - EBFM. PhD focussed on the social
				element of EBFM - assessing risk and value the social
				interactions. PhD was transdisciplinary. Working in a

				geoscience area currently but looking to go back into
				working with the industry.
Kate	Barclay	University	Kate.Barclay@uts.edu.au	Arts/Japanese language/international development.
		of		PhD looked at Japanese tuna fishing and canning
		Technology		company operating in the Solomon Islands. Finished
		Sydney		PhD in 2001 and continued in Tuna fisheries - contract
				research. Previously saw herself as an Asian studies
				scholar - up until 2013 when she went to MARE and
				IFET made her realise that focussed on environmental
				sociologist was more in line with her interests.
				Evaluating the wellbeing approach of fisheries and also
				an interactive governance approach to fisheries
				management. More recently looking at gender and
				fisheries.
Kate	Brooks	KAL	kate@kalanalysis.com.au	As a social scientist who began her career in strategic
		Analysis		marketing and corporate affairs, Kate now operates as
				an independent consulting sociologist, managing a

				variety of research and strategy projects in service
				delivery, agriculture and rural industries. Her
				experience incorporates board and advisory panel
				membership and advice, community consultations,
				community profiling, social impact assessments;
				program, policy and social monitoring and evaluation.
				Kate's particular areas of expertise are social capital to
				improve industry and community cohesion and success,
				and developing new frameworks and approaches to
				address challenges in changing environments. An
				Adjunct Senior Fellowship with ANU and Deakin
				University, and Fellow of the Australian Rural
				Leadership Foundation.
Kirsten	Abernethy	kirsten.abernethy@gmail.com	@_SeaWomen	Kirsten Abernethy is a fisheries social scientist and has
				worked for over 10 years in fishing communities as a
				researcher, practitioner and advocate. Kirsten has
				worked in the UK, Solomon Islands and Timor Leste

				(University of East Anglia, University of Exeter, WorldFish) in areas including health and wellbeing of fishing families, behaviour and decision making in fishing businesses, social-ecological innovation, and fisheries governance. Since 2015, she has worked in
				fisheries governance. Since 2015, she has worked in Victorian wild-catch fisheries. After two years working at Seafood Industry Victoria, she is now an independent consultant. Current Australian projects include topics of: health in fishing families; the contribution of fishing and aquaculture industries to communities, and determinates of socially-supported fisheries and aquaculture. In 2017 Kirsten was the Victorian Agrifutures Rural Women Award winner and is interested in greater recognition and opportunities for
				women in the seafood industry.
Georgett e Leah	Burns	Griffith University	leah.burns@griffith.edu.au	Environmental Anthropologist. Griffith Uni - Environmental faculty. Looks at angler and rec fishers

				and how they interact with fish and seals. Has
				experience in Iceland. How do we influence the
				stakeholders to create change. Focus on what is fun and
				fight for funding to do it.
Melissa	Nursey-Bray	University	melissa.nursey-	Dr Melissa Nursey-Bray is an Associate Professor and
		of Adelaide	bray@adelaide.edu.au	currently Head of Department in Geography,
				Environment and Population (GEP), and the
				Coordinator of the GEP Masters Dissertation Program.
				She also teaches the research methods, community
				engagement and EIA subjects within it as well as
				undergraduates subjects in ethics, Indigenous resource
				management, coastal management and EIA. She is
				currently co-theme leader for the Indigenous theme of
				the Social Economic and Institutional Climate
				Adaptation Research Network and is leading projects in
				fisheries management in partnership with SARDI and
				FRDC.

					https://researchers.adelaide.edu.au/profile/melissa.nurs
					<u>ey-bray</u>
Michelle	Voyer	University	mvoyer@uow.edu.au	@michelle_voye	University of Wollongong. Was a biological scientist
		of		r	who ended up in planning. Looking at how do we look
		Wollongon			at the social - told just through the economic impact.
		g			Fisheries/commercial/ recreational - social science and
					policy and how social science can influence policy.
					Michelle is a Vice Chancellors Post-Doctoral Research
					Fellow with the Australian Centre for Ocean Resources
					and Security (ANCORS) at the University of
					Wollongong. Before joining ANCORS she had worked
					with the University of Technology Sydney on research
					into the social and economic contributions of
					commercial fishing to NSW communities. She has
					worked on marine conservation issues for over 15 years
					firstly in NSW and Queensland State Government
					Departments, where she was employed in a number of

				roles relating to protected area and threatened species
				management as well as coastal planning and
				assessment. In 2014 she completed her PhD examining
				the social acceptability of marine protected areas, with
				a focus on two NSW marine parks. Since then she has
				been engaged in a range of projects investigating the
				human dimensions of marine conservation and resource
				management, including commercial and recreational
				fisheries. Her current research with ANCORS is a cross
				disciplinary investigation into social equity
				considerations in the Blue Economy
Mike	Fabinyi	University	Michael.Fabinyi@uts.edu.au	Anthropologist based at UTS. Interested in the social,
		of		political and economic forces affecting livelihoods;
		Technology		mostly in developing countries. PhD work in
		Sydney		Philippines, has worked also in the Pacific, China and
				Indonesia. Recent research has examined the role of
				China in global fisheries and seafood issues, currently

			working on a report examining Australian seafood exports to China. Other current projects include work on the Blue Economy in China and Philippines, sea cucumber and gender in Vietnam and Philippines, and governance of tuna fisheries in Indonesia and Solomon Islands.
Nicki	Mazur	nickimazur@grapevine.net.au	Independent Consultant and casual lecturer Nicki is dedicated to helping achieve sustainable natural resource and social policy solutions that take into account the complex needs and concerns of individuals and communities. Also interested in the human dynamics of other public policy areas, Nicole is highly regarded for her interpersonal skills and ability to create engagement spaces in which people feel comfortable about discussing the issues affecting them.

				As the Principal Consultant for EEC, Nicole has
				developed a reputation for formulating responsive,
				flexible, tailored project management and social
				research services. She is equipped with excellent
				research, project management and client liaison skills,
				and possesses a detailed understanding of the
				challenging operational environment occupied by
				policy makers.
				http://www.envisionconsulting.com.au/Envision-
				Corporate-Profile/
Nyree	Stenekes	ABARES	nyree.stenekes@abares.gov.au	ABARES. Anthropology and government studies
				followed by a civil and environmental engineering
				degree. Came to the idea that it is all really about
				managing and understanding how people interact with
				and use technology rather than the technology itself.
				PhD into community risk perceptions of recycled water

				- looking at the interaction of the people with the
				technology and government agencies. Current research
				agenda is driven by the needs of the Department,
				Agriculture and Water resources and associated
				stakeholders, e.g. industry or other NRM agencies
				departmental interests and needs and election cycles.
				Relevant fisheries research includes: Recreational
				fishing audit; social dimensions of recreational fishing;
				biosecurity and invasive species management, e.g.
				Recreational boat biofouling management behaviour
				risk assessments (marine pests) - behavioural study and
				Marine Pest Social Network Analysis; and the marine
				reserve social impact assessment work.
Ratana	Chuanpagde	Memorial	ratanac@mun.ca	Marine scientist who got into disciplinary work
	e	University,		(worked with Daniel Pauly and an economist) looking
		Canada		at how to understand values from a non-monetary
				perspective but based on water issues. Looking for a

				framework and came into 'FishGovNet' network which was funded by EU to research fisheries governance. But were criticised for not having a natural scientist; women or people from developing country - hence Ratana was invited to join the group.
Sarah	Jennings	IMAS; UTAS; FRDC	sarah.jennings@utas.edu.au	Economist UTAS undergrad in hydrology and economics. Did honours in economics with a focus on NRM. Standard teaching profile, but was nagged by fisheries biologists and found fisheries very open to economics. Led the FRDC economics development program which has now morphed into the human dimensions research program
Sevaly	Sen		sevaly.sen@gmail.com	Independent Consulting providing, social, economic, policy and strategic analysis, advice and research on fisheries and aquaculture management to governments, international development agencies, financial

				institutions, private companies and non-government organisations.
Simon	Foale	James Cook University	simon.foale@jcu.edu.au	Interests in the relationship between Western science and environmental knowledge in other cultures, and now continues to research the interface between different knowledges and resource management, while teaching anthropology. Also has interests in the relationship between power, science and transnational conservation projects, and increasingly interested in the use of secrecy jurisdictions by transnational resource extracting corporations, and the extent to which this facilitates further power imbalances. https://research.jcu.edu.au/portfolio/simon.foale/

Tanya	King	Deakin	tanya.king@deakin.edu.au	@cultureaqua	Started studying science (chemistry) but decided social
		University			interaction was more complex and had a greater
					influence on environmental and human outcomes than
					molecular composition. Studied anthropology, focus on
					women in agriculture, drawing on farming background.
					PhD on shark fishery, but seasickness compelled a
					focus on the move to quota in early 2000s. Mental
					health implications of management change emerged in
					this context. Other research has addressed gender,
					water distribution policy and community attitudes, and
					approaches to tertiary pedagogy. Mental health as a key
					issue for the seafood industry remains a central focus,
					with an emphasis on promoting practical strategies and
					solutions for ecological and social justice.

## Appendix 5: Original Agenda:

Day One:

Time	Activity	Facilitator	Outcome/output
10am-	Introductions – 5 minutes each (max) to outline key	Tanya King	Short bio's of all participants, to be collated in outcomes
10:45am	research areas, current and future research agenda		of workshop, and beyond.
	and any general observations about the sector.		How research agendas set in past.
	HOW did you set your research agenda?		
10:45am-	Overview of work undertaken by FRDC (Social	Kate Brooks	Collective understanding of:
11:00am	Sciences Audit (2009/317)		• audit themes
			• identified gaps
			• update plans.
11:00am-	Morning tea		
11:30am			
11:30am-	Workshop:	Kate Brooks	Documented appraisal of relevance of 2009/317 themes
12:00pm			and identified gaps.

	• Are the audit themes still appropriate?		
	• Have the gaps been filled?		
	• If yes, provide reference		
	• Are themes still relevant/key?		
12:00-	Overview of FRDC HDR objectives	Emily Ogier	
12:30			
12:30pm-	Lunch		
1:30pm			
1:30pm-	An international focus – This is the part of the day	Ratana Chuenpagdee	Documented account of global issues facing fisheries,
3:00pm	where Professor Chuenpagdee can comment on her		issues facing particular international fisheries, lessons
	observations of trends and issues and themes		and innovations relevant to Australia.
	emerging in the international context, both those		
	impacting all SSF, to those relevant to particular		
	fisheries. We envisage this session to be somewhat		
	interactive, with workshop participants reflecting		
	on the relevance of issues to the Australian context.		

3:00pm-	Afternoon tea		
3:30pm			
3:30pm-	Workshop:	Emily Ogier	Documented account of emerging issues (organised
5:00pm	<ul> <li>Emerging issues facing sector (eg. new management systems, automation, seafood consumption patterns)</li> <li>Theme?</li> <li>Gaps in research (eg. summary of all relevant changes in X fishery, drivers of technology innovation, economic costbenefit-analyses of value-adding)</li> <li>Capacities and resources (eg. Existing datasets and profiles, curated collections, ABARES data???).</li> <li>Challenges (eg. synthesising immense detail, overcoming fisher reticence to share</li> </ul>		thematically), gaps in research and existing capacities (10 max.).

confidentiality)	knowledge	[the	"IP"	issue],
connuclianty).	confidentiality	).		

Day Two:

9:00am-	Functions of social science – what is our	Kate Brooks	Broad reflections, a chance to articulate some general
9:30am	understanding of the role of social science in the		principles or collective frustrations.
	seafood industry, both in effect and in an 'ideal		
	world'? Pre-emptive/adaptive/visioning. What are		
	the facilitators and barriers?		
9:30am-	Revisiting of 'emerging issues' from Day One.	Kate Brooks	As above.
10:30am	Additions? Clarifications?		
10:30am-	Morning tea		
11:00am			

11:00am-	Identification of emerging methodologies.	Kate Brooks	Overview of key methodologies used by Australian
12:00pm	Academic versus 'applied' tension in project		researchers, as well as those used in other contexts, and
	funding.		interdisciplinary approaches.
12:00-	Ratana – what do we need?		
12:30pm			
12:30-	Lunch		
1:30pm			
1:30-	Workshopping (small group) – Identification of	Tanya King	List possible research
3:00pm	commonalities in ongoing work, opportunities for collaboration.		Need; theme; project; output; team
3:00-	Afternoon tea		
3:30pm			

3:30-	Options for ongoing social sciences platform in Tanya King
4:00pm	regard to research vision/ issues and
	methodologies.
4:00pm	Close