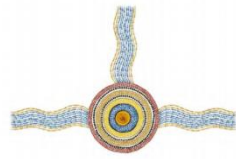


Resolution: Integrating Measures of effectiveness in Indigenous Land and Sea Management

Co-researchers, Melinda Holden (Traditional Owner), Mick Hill (Traditional Owner), Colleen Corrigan (University of Queensland)



THE UNIVERSITY OF QUEENSLAND
AUSTRALIA



GIDARJIL
DEVELOPMENT
CORPORATION



Charles Darwin
UNIVERSITY

Purpose: to understand Indigenous measures of effectiveness

1. Indigenous elders are co-researchers
2. Questionnaire developed
3. Co-researchers lead the interviews



Interview guide: Integrating Measures of Indigenous Land and Sea Management Effectiveness

Directions: Please make sure each interviewee is (1) given an information sheet to keep, (2) signs a consent form, and (3) provides basic data for the interview sheet.

Location: Gladstone, Bundaberg, Queensland

Date: December 2014

There are five key areas we want to explore with interviewees in the semi-structure interviews.

6. General connection to Port Curtis Coral Coast Region
7. Specific connection to natural environment/marine/coastal area
8. Health of environment/country, now and in past
9. Looking after country, activities and roles
10. Social and environmental benefits/costs of land and sea management

Note for interviewers: For each of these areas, this guide provides some open-ended questions that you might use to encourage discussion. An interview can be brief (10 minutes) or up to an hour or more depending on the enthusiasm of the interviewees. While we want to ensure each participant responds to all five key areas, their story may weave between the different questions or just some of them. You can use a pen to tick the boxes of areas that were discussed.

Q1. General connection to Port Curtis Coral Coast (PCCC) region- what is their story?

- What is your relationship to this area? (cultural aspects or other)
- Do you live here?
- What community or group do you belong to?
- Are there things here that make it unique or different from other places?
- Are there particular places here that are important to you and your family? Where are they and why are they important?

Q2. Connection to the natural environment and Country

(ask these questions if different from the discussion above)

- Are there things you particularly like/value about the environment here? (fishing, turtles, hunting, bush foods, recreation, etc)
- Please tell me about your relationship to the particular/marine area in particular. How do you associate with the coastal area? Do you feel connected to it, and how?

Q3. Health of Environment/Country

- What do you think about the natural environment/landscape in the PCCC?
- What is the current state or health of your land and sea country?
- What changes have you noticed about this region over your lifetime? (open-ended, but help them to determine a reference of time if possible, since childhood, in past 2 years/5 years/10 years, etc)

Integrating Measures of Indigenous Land and Sea Management Effectiveness

Consent Form

I, _____, consent to participate in a study called Integrating Measures of Indigenous Land and Sea Management Effectiveness to be undertaken by Mick Hill, Maininda Holden, and Colleen Corrigan in September 2014.

We would like to work in partnership with Indigenous people to understand and measure how well land and sea management in Australia is working. We hope to build on the tools Indigenous land managers are already using, especially the aspects that are working well. We are very interested in supporting healthy natural and social environments.

I acknowledge that:

- the aims and approach of this study, and any benefits and risks have been explained to me by a member of the research team;
- I volunteered to participate in this study, and haven't been pressured to do so;
- identity of individuals participating in this study will not be made public unless requested;
- photos of participants and/or artwork will only be used where authorized by the individual;
- I am free to withdraw my consent at any time during the study without consequences;
- if I withdraw my consent, information I provided will be returned or destroyed on my request;
- information is being collected according to guidelines provided by the University of Queensland ethics committee.

Signature: _____ Date: _____

Preferred contact: _____

the Great Barrier Reef, the Great Sandy Marine Park, Mon Repos Conservation Park, etc)

- What do you know or think about the protected areas? Are they important, and why? Are they working well, why or why not?
- Do you know that there is a PCCC Strategic Plan? What do you think of the following statement?

The PCCC Strategic Plan 2012-2030, entitled "Investing in our Shared Future: United in Focus, Spirit, Culture and Identity" states that "our cultural heritage, land, sea and environment are our most valued, respected and protected possessions and each need to be afforded the utmost respect, care and attention".

Q3. Social and environmental benefits/costs of land and sea management

- What benefits or value does the natural environment/healthy Country (2030) give to you? (sometimes these are called ecosystem services, like fresh water, clean air, food, materials)
- What benefits or value does managing or looking after Country give to you? To your family? To your community?
- What are some of the challenges or costs associated with looking after Country?
- If you and your family had an expanded role in management, what would be the costs of that? the benefits?
- What are some of the challenges or costs associated with the protected areas?

Is there anything else the participant wanted to talk about?

Thank you for taking the time to share! You can find information about the project and use of information on the information sheet.

Gidarjil Immersion Weekend



“What does country look like to you?”



Conducting interviews



Stories of changes



Gidarjil Rangers monitoring turtles



Changes to environment over time

- It's gone. There's no more swamp. You know, there's nothing there. You drive out there now and it's just all houses. There's nothing there at all. (female, age in 70s)
- They're bulldozing everything. (female, age in 60s)
- The homes that our families lived in and the little riverlet and the lagoon where I swam in; it doesn't exist anymore. It's now all built up area (female, age in 60s)
- We going 50 years ago, you know, you get that river and you catch a good feed. But today, it's flat out catching anything. (male, age 80)
- There's a lot of dams and that going on the Burnett. You know, they're sort of mucking the flow of the river up. (male, age 82)
- You get all these poisons and fertilisers and everything going into the waterways and killing all the stuff off. Kill all the vegetation off that the fish and crabs and all that normally feed on. It's a lot worse now than what it was back in our day. (male, age 66)
- + Reckon it's getting better, especially for wildlife because of the technology available (eg for turtle monitoring etc) (male, 20s, ranger)
- + After the 2013 floods, It's beautiful. It's a lovely river. It is, it's lovely and green. (female, age 65)
- + I'm hoping that one day I can come back here when I get older and it's still going to be in the same pristine state like it was growing up (female, age 27)

Coding transcripts for analysis

Q1. General connection to Port Curtis Coral Coast (PCCC) region - what is their story?

Q2. Connection to the natural environment and Country

Q3. Health of Environment/Country

Q4. Looking after Country

Name	Sources	References	Created On	Created By	Modified On	Modified By
Environmental	25	595	25/05/2016 16:17	CC	04/06/2016 19:25	CC
Ecosystem	13	28	25/05/2016 17:46	CC	23/06/2016 14:39	CC
Event	4	8	11/06/2016 19:22	CC	24/06/2016 13:31	CC
Healthy environment indicator	13	19	11/06/2016 15:15	CC	23/06/2016 15:21	CC
indicator of change, environmental	19	89	10/06/2016 16:27	CC	24/06/2016 14:39	CC
Place names	25	151	25/05/2016 16:16	CC	24/06/2016 13:39	CC
Species	25	142	25/05/2016 16:38	CC	24/06/2016 13:39	CC
Status	19	51	25/05/2016 17:38	CC	24/06/2016 13:31	CC
Threats	22	98	25/05/2016 16:16	CC	23/06/2016 16:52	CC
Value	8	9	25/05/2016 18:08	CC	24/06/2016 13:43	CC
Improvements	4	6	25/05/2016 18:35	CC	10/06/2016 16:30	CC
Indigenous relevance	0	0	25/05/2016 16:18	CC	04/06/2016 19:24	CC
Knowledge	23	224	25/05/2016 16:29	CC	11/06/2016 18:36	CC
Management	25	251	25/05/2016 16:23	CC	12/06/2016 21:16	CC
Quotes	15	30	11/06/2016 16:10	CC	24/06/2016 13:45	CC
Social	25	775	25/05/2016 16:16	CC	04/06/2016 19:25	CC
Access	17	38	25/05/2016 16:54	CC	24/06/2016 13:30	CC
Connection to country	24	79	25/05/2016 17:36	CC	24/06/2016 13:18	CC
Culture	22	84	25/05/2016 16:17	CC	24/06/2016 13:43	CC
Differences between aboriginal & non	19	81	25/05/2016 18:33	CC	24/06/2016 13:45	CC
Differences between aboriginal and tr	4	14	12/06/2016 22:12	CC	23/06/2016 16:39	CC

A : Ecosystem
B : Event
C : Healthy environment indicator
D : indicator of change, environmental
E : Place names
F : Species
G : Status
H : Threats
I : Flow
J : Value
K : Improvements
L : Lack of
M : Elders and rangers, inter-learning
N : Intergenerational
O : Interpretation, rangers
P : Other learning
Q : Training & Education
R : Loss of
S : Traditional Ecological
T : Improvements
U : Other managers, partners
V : Priorities for management
W : Rangers, aboriginal
X : benefits
Y : Traditional Owners
Z : benefits
AA : TUMRA
AB : Access
AC : Connection to country
AD : Culture
AE : Cohesiveness
AF : Language
ences between aboriginal & non-aboriginal
ces between aboriginal and traditional owners
AI : Emotions
AJ : Family
AK : Generational differences
AL : Health
AM : Identity
AN : Income
AO : Indicator of change, social
AP : Threats
AQ : Use or Activity
AR : Future
AS : Past

Environmental and Social indicators

Indicator Domain		Elders (15)	Youth (10)	Total	% of total	Avg # indicator references per elder	Avg # indicator references per youth
Environmental	+	40	11	51	10.6	2.7	1.1
	-	93	32	125	26.0	6.2	3.2
Social	+	104	64	168	34.9	6.9	6.4
	-	93	44	137	28.5	6.2	4.4
		330	151	481	100		
		Female (15)	Male (10)			Avg # indicator references per female	Avg # indicators references per male
Environmental	+	33	18	51	10.6	2.2	1.8
	-	75	50	125	26.0	5.0	5.0
Social	+	106	62	168	34.9	7.1	6.2
	-	88	49	137	28.5	5.9	4.9
		302	179	481	100		

Positive and negative Indigenous social indicators

SDTelement	Negative Social Indicators			Positive Social Indicators		
	Total	%	Description	Total	%	Description
Autonomy	24	17.9	Regards challenges in having a voice or involvement in decisions	35	20.7	Awareness that some progress has been made for being consulted with and included in broader society; having an Aboriginal corporation and strategic plan
Competence	49	36.6	Concern about the youth generation and their lack of training, motivation, mental health issues	84	49.7	Value of existing knowledge; learning from or providing knowledge to other generations; Indigenous ranger training, activities, job; learning from elders and rangers
Relatedness	61	45.5	Degraded country to country that affect relationships to it, such as fewer fish; environmental impacts from development; inability to access areas for traditional, subsistence or family reasons	50	29.6	Having a relationship with country, with family, or having memories of these connections; caring for country or gaining health from relating to country; belonging to country and community, identity
Total	134			169		
				Proportion of + indicators in future		Rationale
				Autonomy	21 60.0	Having recognition, ability to make decisions, and choice to be involved in future
				Competence	12 14.3	Potential for Indigenous training opportunities, societal valuation of traditional knowledge
				Relatedness	3 6.0	Future generations having ability and access to country
				Total	36	

Resilience and Learning

- “You know, like how certain turtles, they come back every year like for 30 years, eh. It’s amazing. They travel to the other side of the world nearly, you know, over to South America and that. Then they come back again. Who ever knew that?” (male, 60s).
- “And I just realised now, by living up there next to the rangers and living on country, it’s been ... a great thing for me to be able to learn all this stuff again.” (female, 60s).
- It’s not only learning, it gives them that sense of pride too, and the skills, of knowing that they’re caring for their country and they’re putting things back in. (female, age in 70s)

Emergent issues

- Significance of family and inter-generational relationships- passing knowledge forward/ but also looking backward
- Significance of access to country/ increased limitations---- for various reasons--- traditional use, subsistence, health, cultural importance, intrinsic connection
- Health of the environment--- signified by flow, unrestricted flow--- knowledge of systems as well as species---- lack of flow
- Acknowledgement of change but also maintenance of “pristine” status or quality of country for future generations
- Indicators of change/ threats (built environment, development, youth learning, overfishing, etc)
- Variation in generational baseline knowledge of environment (older generation vs younger generation)
- Negative impact on culture, connection, country, knowledge
- Sense of respect and obligation for each other and for the environment
- Value of Indigenous rangers

Self-determination Theory

- from Ryan and Deci 2000
- Intrinsic (self-driven) motivation is facilitated by:
 1. **Autonomy**- choice, acknowledgment of feelings, and opportunities for self direction
 2. **Relatedness**- connecting to others, being cared about, caring for
 3. **Competence**- having the capacity to complete an action, goal, process, etc