

## GULLS VULNERABILITY SURVEY

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**Please note** that when using this survey, for some question instructions will need to be given to skip proceeding questions where appropriate.

Qtn Number	Australia	South Africa	India	Brazil	Other ...	Question	Answer
	✓	✓	✓	✓		Surveyor name(s)	
	✓	✓	✓	✓		Date	
	✓	✓	✓	✓		Start time	

### BASIC RESPONDENT DATA

✓	✓	✓	✓		Respondent name	(open answer)
✓	✓	✓	✓		House No/ address	(open answer)
✓	✓	✓	✓		Gender	Male
						Female
✓	✓	✓	✓		Age	(open answer)

	x	✓	✓	✓	Village/Community	(open answer)
	x	✓	x	X	First language	(open answer)
	x	✓	x	X	Race	(open answer)

### Fishing activity

1.1	✓	✓	✓	✓	Is fishing your main occupation?	Yes
						No
1.2	✓	✓	✓	✓	How many days per week do you go fishing?	Every day of the week
						3 to 5 days a week
						2 to 3 days a week
						1 to 2 days a week
						Once a week
						Less than once a week
1.3	✓	✓	✓	✓	What is the average (typical) length of a fishing trip?	Less than 1 hour
						1- 3 hours
						3-6 hours
						One day
						Two days
						One week
						More than one week
1.4	x	✓	✓	✓	What was your highest catch ever on a day of fishing and when was that	(Kilos - Year)
1.5	x	✓	✓	✓	What has been your best catch this year?	(Kilos)
1.6	x	✓	✓	✓	What is the average distance from the coast that you fish at now?	(meters - kilometres)
1.7	x	✓	✓	✓	Has this average distance increased, decreased or not changed in the time you have been fishing?	Increased
						Decreased
						Not changed
1.8	✓	x	x	X	How much of your household income is derived from fishing?	(\$ or % of total household income)
1.9	✓	x	x	X	What would you do if you were unable to make a living from fishing?	(open question)
1.10	✓	✓	✓	✓	List the three most important fish species you target for <b>commercial</b> purposes?	(open question)
1.11					Have these top three species changed in the past five years?	Yes
						No

## BASIC HOUSEHOLD DATA

### Household income

2.1	✓	✓	✓	✓	Is there much variation in your household income between the summer and the winter period? (pre monsoon/ monsoon /post monsoon after the ban – India)	Yes
						No
2.2	✓	✓	✓	✓	What is your average household income per month before tax and from all sources?	(\$/month)

### Fishing business

3.1	✓	✓	✓	✓	Do you own your own fishing business (the licences to go fishing)	Yes
3.2	✓	✓	✓	✓	How many people outside of family) did you employ over the last 12 months?	(number)
3.3	✓	✓	✓	✓	Approximately how much income does your fishing business turn over each month?	(\$/year)

### Household expenditure

4.1	x	✓	✓	X	Where do you mainly go to buy your food purchases?	(Store and place)
4.2	x	✓	x	✓	What percentage of foods are (by volume)	Bought from the store .. %
						Exchanged .. %
						Grown by yourself .. %
						Total food 100 %

## SENSITIVITY

### Household dependence on marine resources

#### Social dependence (SD) on fishing

5.1	✓	✓	✓	✓	I depend on the following institutions & people for day to day resources to go fishing	Weather predictions and news
						Buyers of fish
						My family
						Fellow workers
						None
5.2	✓	✓	✓	✓	Who do you interact with when going fishing?	Other fishers
						Suppliers fishing tackle/fuel
						Marine reserve managers
						Safety authorities
						Scientists
						Company officials

#### Economic dependence (ED) on fishing

						Food consumption	
6.1	✓	✓	✓	✓	How many days a week do you and your household consume fresh marine food?	(out of 7 days)	
6.2	x	✓	✓	✓	Is the fish you eat from your own catch of fish or do you buy fish?	(open question)	
6.3	✓	✓	✓	✓	Which type of fish do you consume most often?	(open question)	

### Economic dependence (ED) on other resources

7.1	x	✓	x	✓	How many days a week do you and your household consume fresh vegetable products?	(out of 7 days)
7.2	x	✓	x	✓	How many days a week do you and your household consume fresh meat?	(out of 7 days)
7.3	x	✓	✓	✓	What is the most important food source for your family's household?	we grow it in the garden
						we buy it in the local shop
						we fish for food/a small portion from catch
						we collect our food from the bush/sea
						other
7.4	x	✓	x	✓	How do you pay for the goods you don't grow or catch yourself?	we exchange goods for it
						we pay for it using cash
						we obtain it on credit
						other
7.5	x	✓	✓	✓	Do you have a garden or plantation?	Yes
						No
7.6	x	✓	x	✓	If you grow food, why do you grow food	I cannot afford to buy all my food (i.e. I have no other option)
						I could buy food but prefer to grow food to save money
						I prefer fresh food
						Other (explain)
7.7	x	✓	x	✓	How much of your crops are grown for commercial purposes	(out of 100%)
7.8	x	✓	x	✓	Where is your growing activity?	Close to household
						Away from household
						Other
7.9	x	✓	✓	✓	List the crops that you grow	(list)
	x	✓	✓	✓	Do you have livestock?	Yes
7.10						No
7.11	x	✓	✓	✓	Where is your livestock activity?	Close to household
						Away from household
						Other
7.12	x	✓	✓	✓	List the livestock you own and numbers	(list)

### Historical & Cultural dependence (H&CD) on fishing

					Historical involvement	
8.1	✓	✓	✓	✓	How long have you been a fisher?	(years)
8.2	✓	✓	✓	✓	When did the fishery you are involved with begin in this area?	(year)
8.3	✓	✓	✓	✓	Were previous generations of your family/ancestors fishers?	Yes
						No
8.4	✓	✓	✓	✓	Which family relations were fishers in the past?	(list)
8.5	✓	X	✓	X	Would you describe your family as having a fishing identity/culture?	Yes
						No
					Social mobility	
9.1	✓	✓	✓	✓	What is/was the main occupation of your parents?	Father
						Mother
9.2	✓	✓	✓	✓	Did your parents attend school?	Father
						Mother
9.3	✓	✓	✓	✓	To what level did your parents attend school?	Father
						Mother
9.4	✓	✓	✓	✓	Did your parents own their own house?	Yes
						No
9.5	✓	✓	✓	✓	Did your parents own their own boat?	Yes
						No
9.6	x	✓	x	✓	Would you say you are financially better off than your parents?	Yes
						No

## ADAPTIVE CAPACITY

### Flexibility

#### Personal flexibility (PF)

10.1	✓	✓	✓	✓		Right now, if you had a chance would you:	Change your job
							Stay doing what you are doing
10.2	✓	✓	✓	✓		At this time do you feel you could find work in a different sector?	Yes
							No
10.3	✓	✓	✓	✓		How many options for a different type of job/work would you say you have?	Many options
							Some options
							Few options
							No options
10.4	✓	✓	x	✓		Have you done any courses to improve your employability?	Yes
							No
10.5	✓	✓	x	✓		If yes, what courses were they?	(list)
10.6	✓	✓	✓	✓		Would you be happy working for someone else?	Yes
							No
10.6	✓	✓	✓	✓		If so, why?	(list)

#### Occupational flexibility (OF)

11.1	x	✓	✓	✓		Have you had a change of employment in the past 5 years?	Yes
							No
11.2	X	✓	✓	✓		If so, what was your previous occupation?	(list)
11.3	X	✓	✓	✓		Do you prefer your new occupation to your previous occupation?	Yes
							No
11.4	✓	✓	✓	✓		Would you be interested in doing a job other than fishing if you could earn as much as you do fishing?	Yes
							No
11.5	✓	✓	x	x		List the factors that a new job must possess for you to take it (tick any that apply)	Adventure
							Flexibility
							Part time options
							Intellectual challenge

							Personal safety
							Low risk & Certain income
11.6	✓	✓	✓	✓		List the alternative employment sectors that you would consider to take another job in (tick any that apply)	Tourism
							Service industry
							Aquaculture
							Different fishing sector
							Office work
							Mining
							Masonry /Carpentry/Daily wage labour
							Other
11.7	✓	✓	✓	✓		What do you see as the biggest risk to the fishing livelihoods in this community?	The market
							Environmental change
							Injury /Health
							Management changes
							Reduced fish abundance
							Other
11.8	x	✓	✓	✓		In which sector do people who have left fishing find work in this community?	(list)

### Institutional flexibility (IF)

						Markets	
12.1	x	✓	✓	✓		How many markets are there in your community where you can <b>buy</b> fish?	(number)
12.2	✓					AUSTRALIA VERSION : What proportion of your product do you sell directly to different market types such as:	Wholesalers: __%,
							Retailers: __%,
							Restaurants: __%,
							Members of the public: __%,
							Other _____: __%
12.2		✓	✓	✓		By which avenue do you <b>sell</b> your fish?	Wholesalers: __%,
							Local individual fish buyer
							Large processor
							Directly off the boat
							Intermediary /middlemen
							Other



12.3	x	✓	✓	✓	If you sell through middlemen, how would you describe your relationship with middlemen in this community?	(open question)
12.4	x	✓	x	✓	If NOT through middlemen, how would you describe your relationship with companies or buyers you sell your fish to?	(open question)
12.5	x	✓	✓	✓	How many markets/auction sites are there in your community where you can <b>sell</b> your fish directly?	(number)
12.6	x	✓	x	✓	Do you ever sell goods to a fish market outside your community?	Yes
						No
12.7	x	✓	x	✓	How far is that market from your house?	(km/ hours/min walking)
12.8	✓	✓	x	✓	Are you fishing for orders from the markets?	Yes
						No
12.9	✓	✓	✓	✓	Have fish prices been relatively stable over the past 3 years?	Yes
						No
12.10	✓	✓	✓	✓	What do you think dictates the price of fish most in the local market?	The power of the middle men
						The price the fisher demands
						The quantity of the fish that is available that day
						Other
12.11	x	✓	✓	✓	How many markets are there in your community where you can buy/sell fresh meat and vegetables?	(number)
					Resource management institutions	
13.1	✓	✓	✓	✓	Does your community have any type of marine resource management?	Yes
						No
13.2	✓	✓	✓	✓	If your community has marine resource management , what kind of management	Traditional management; managed by chiefs/custom
						Community has agreed on a marine managed area or MPA
						Written management plan with a monitoring or decision making process and a committee that is in charge
						Government controlled management
						Industry led management
						Other
13.3	✓	✓	✓	✓	Have rules, practices changed in the past in response to environmental changes?	Yes
						No

13.4	x	✓	x	✓	How have the rules changed?	(open question)
13.5	✓	✓	✓	✓	Do you have to report/record your catches at a landing site or to an authority?	Yes
						No
13.6	✓	✓	✓	✓	To whom do you have to report?	(open question)
13.7	✓	✓	✓	✓	List the three community organisations that are active in your village/town that come to mind?	(list)

## SENSITIVITY

### Household dependence on marine resources

#### Social dependence - Rating questions

					Attachment to place				
14.1	✓	✓	✓	✓	Would you say you feel like you belong or do not belong to this community/town?	Strongly belong	Belong	Slightly belong	Not at all belong
14.2	✓	X	x	X	How long do you plan to be a resident of this town?	Rest of my life	Many years	A few years	Not long at all
14.3	✓	X	x	X	How strong are the friendships you have in this town?	Very strong	Strong	Slightly strong	Not strong at all
14.4	✓	✓	✓	✓	How important are the friendships/relationships you have in this town?	Very important	Important	Slightly important	Not at all important
14.5	✓	X	x	X	How possible is it, if you need advice, to go to someone in your community?	Very possible	Possible	Slightly possible	Not at all possible
14.6	✓	X	x	X	How often do you socialise with people in your town/community?	Very often	Somewhat often	Rarely	Never
					Recreational dependence				
15.1	✓	X	x	X	How important is recreational fishing to your life?	Very important	Important	Slightly important	Not at all important
15.2	✓	✓	x	✓	How often do you fish recreationally?	Very often	Somewhat often	Rarely	Never
					Attachment to fishing				
16.1	✓	X	✓	X	Would you say you fish just to earn a living or for pleasure as well?	Only for a living	Living more than pleasure	Pleasure more than a living	Only for pleasure
16.2	✓	X	✓	X	Can you think of another job you would rather do than fishing?	Can think of many	Can think of some	Can think of few	Can think of none
16.3	✓	X	✓	X	Would you say being independent is the worst thing or the best thing about being a fisher?	Best thing	Good thing	Bad thing	Worst thing
16.4	✓	✓	✓	✓	How proud are you to tell people that you are a fisher?	Very proud	Proud	Slightly proud	Not proud at all
16.5	✓	X	✓	X	Would you say fishing for you is a lifestyle or just a job?	Lifestyle only	More lifestyle than job	More job than lifestyle	Job only
16.6	✓	✓	✓	✓	Would you like your children to continue in the fishing profession?	Like very much	Like	Not like	Not like at all

**Economic Dependence– Rating questions**

					Economic dependence on fishing				
17.1	✓	x	✓	X	How likely is it you will have to sell your house if your fishing business fails?	Very likely	Somewhat likely	Not likely	Not likely at all
17.2	✓	✓	✓	✓	How possible would it be to feed your family if you did not go fishing?	Highly possible	Possible	Slightly possible	Not at all possible
					Competition for fish				
18.1	x	✓	✓	✓	Would you say there are too many or too few fishers in the fishing industry in this community?	Too many	Slightly too many	Slightly too few	Too few
18.2	✓	✓	✓	✓	Would you say there are too many or too few fishers working in the areas you fish?	Too many	Slightly too many	Slightly too few	Too few
18.3	✓	✓	✓	✓	How concerned are you about the level of illegal fishing that is occurring?	Very concerned	Concerned	Slightly concerned	Not concerned at all
18.4	✓	x	x	x	Would you say illegal fishing is affecting or not affecting the catches of those who are honest?	Affects a lot	Affects somewhat	Not affecting much	Not affecting at all
18.5	✓	X	✓	X	Would you say your fish catches are higher or lower by the presence of industrial fishing?	Much higher	Higher	Lower	Much lower

### Historical & Cultural Dependence - Rating questions

					Cultural importance of fishing				
19.1	✓	✓	x	✓	How much was your local knowledge about fishing included in local natural resource management plans?	Very included	Included	Slightly included	Not included at all
19.2	✓	✓	✓	✓	How concerned are you by the lack of young people entering the fishing industry in your area?	Very concerned	Concerned	Slightly concerned	Not concerned at all
					Local ecological knowledge				
20.1	✓	✓	✓	✓	How much do you think you know about the environment in which you fish?	A lot	Quite a lot	A little	Nothing
20.2	✓	✓	✓	✓	How important do you think it is to pass on local knowledge about fishing to younger generations?	Very important	Important	Slightly important	Not at all important
20.3	✓	✓	✓	✓	Would you say local knowledge about fishing is being lost or maintained in this community?	Well maintained	Maintained	Partly lost	Almost all lost

## ADAPTIVE CAPACITY

### Flexibility

#### Personal flexibility - Rating questions

					Perception of risk in approaching change				
21.1	✓	✓	✓	✓	How used would you say you are to the changes in everyday life?	Very used to it	Used to it	Not used to it	Not at all used to it
21.2	✓	✓	x	✓	Would you say that only big companies or many fishing groups will survive future changes in the industry?	All fishing groups	Many fishing groups	Some fishing groups	Only big companies
					Ability to plan, learn and reorganise				
22.1	✓	✓	✓	✓	How well have you planned for your financial security?	Very well planned	Well planned	Planned a little	No plan at all
22.2	✓	✓	✓	✓	How interested are you in learning new skills outside of your area of expertise?	Very interested	Interested	Slightly interested	Not interested at all
22.3	✓	x	✓	x	How often are you thinking of new and better ways to improve your fishing business/livelihood?	Very often	Often	Sometimes	Never
22.4	✓	✓	x	✓	How possible is it for you to make a personal difference in improving the health of the marine environment in this area?	Very possible	Possible	Slightly possible	Impossible
					Perception of the ability to cope with change				
23.1	✓	✓	x	✓	How confident are you that things will turn out well regardless of the changes and challenges you confront?	Very confident	Confident	Slightly confident	Not at all confident
23.2	✓	x	x	x	Would you say that you do not believe or believe that the future will look after itself?	Fully believe	Believe	Believe a little	Do not believe at all
					Level of interest in adapting to change				
24.1	✓	✓	✓	✓	How responsible do you feel to protect the marine environment?	Very responsible	Responsible	Slightly responsible	Not at all responsible
					Attitude to change				
25.1	✓	x	x	x	How often do you volunteer (your time) to community activities?	Very often	Often	Sometimes	Never
25.2	✓	✓	✓	✓	How likely are you to adapt to change compared to others you know?	Very likely	Somewhat likely	Not likely	Not likely at all
					Employability				
26.1	✓	✓	✓	✓	How useful would your skills be in setting up a business other than in fishing?	Very useful	Useful	Slightly useful	Not at all useful

### Occupational flexibility- Rating questions

					Capacity to anticipate change and develop response strategies				
27.1	✓	✓	x	✓	How suitable do you think your community is for tourism activities?	Very suitable	Suitable	Slightly suitable	Not suitable at all
27.2	✓	✓	x	✓	How healthy are the natural resources in your area for tourism?	Very healthy	Healthy	Not very healthy	Not at all healthy
27.3	✓	✓	✓	✓	How important is fishing as an economic activity in this community?	Very important	Important	Slightly important	Not at all important
					Occupational mobility				
28.1	✓	✓	✓	✓	How often are you employed in more than one job per year?	Very often	Often	Sometimes	Never
28.2	✓	✓	✓	✓	How willing are you to move to a bigger town or community for work if necessary?	Very willing	willing	Slightly willing	Not willing at all
					Business approach				
29.1	✓	x	x	x	How comfortable are you making decisions (without much information) about potential changes in the future?	Very comfortable	Comfortable	Slightly comfortable	Not at all comfortable
29.2	✓	x	x	x	Would you say you always or never know how much money is coming in and out of your business?	Always	Often	Sometimes	Never
29.3	✓	x	✓	x	How often do you get professional advice before making a business decision?	Always	Often	Sometimes	Never
29.4	✓	✓	✓	✓	How possible is it to guess how much money your business will make each month?	Very possible	Possible	Slightly possible	Impossible
29.5	✓	✓	x	✓	How detailed a business plan do you have for the following year?	Very detailed	Detailed	Slightly detailed	Not at all detailed
29.6	✓	x	✓	x	How interested are you in learning new ways to improve your business skills?	Very interested	Interested	Slightly interested	Not at all interested

### Institutional Flexibility- Rating questions

					Fishing compliance and conflict				
30.1	✓	✓	✓	✓	Would you say that illegal fishing does not occur or does occur in the community in which you fish?	Occurs a lot	Occurs	Occurs a little	Does not occur at all
30.2	✓	X	✓	X	Would you say that everyone or no-one obeys the rules the community sets?	Everyone	Most people	A few people	No-one
30.3	✓	X	x	X	Would you say that everyone or no-one obeys the rules the official management organisations set for fishing in this community?	Everyone	Most people	A few people	No-one
30.4	✓	✓	✓	✓	Would you say that everyone or no-one knows who the individuals are that break the fishing rules?	Everyone	Most people	A few people	No-one
30.5	✓	✓	✓	✓	How well enforced are the fishing rules that apply in this area?	Well enforced	Just enforced	Enforced a little	Not enforced at all
30.6	✓	✓	✓	✓	How common are conflicts between fishers in this area?	Very common	Common	Not very common	Do not occur ever
					Access to institutional safety nets & information				
31.1	✓	✓	✓	✓	Would you say there are none or many government safety nets in case disaster strikes fishing activities in this community?	Many	Some	Few	None
31.2	✓	✓	✓	✓	How well linked is this community to government departments and/or academic institutions so you receive up to date information about fishing?	Very well linked	Well linked	Linked slightly	Not at all linked
31.3	✓	X	x	X	How well integrated is this community into the academic institutions (universities and scientists) to get information on fishing related matters?	Very well integrated	Well integrated	Integrated slightly	Not at all integrated
31.4	✓	X	✓	X	Would you say that the government is or is not helping to overcome challenges the community faces in relation to marine resources?	Helping a lot	Some help	Little help	No help at all



### Attitude and perception - Rating questions

					Attitude to change				
32.1	✓	✓	✓	✓	How much of a risk do you think environmental change poses to the community you live in?	High	Medium	Low	None
32.2	✓	x	✓	X	How much of a risk do you think environmental change poses to your income and livelihood?	High	Medium	Low	None
32.3	✓	✓	✓	✓	How anxious/scared do you feel about the changes you are seeing in the environment in your area?	Very scared/ anxious	Scared/ anxious	Little scared/ anxious	Not at all scared/ anxious
					Perceptions of change				
33.1	✓	✓	✓	✓	How dangerous are changes in the local weather making fishing?	Very dangerous	Dangerous	Slightly dangerous	Not at all dangerous
33.2	✓	✓	✓	✓	How difficult has it become to catch fish in the areas you fish?	Very difficult	Difficult	Slightly difficult	Not at all difficult
33.3	✓	✓	x	✓	How many changes would you say you have noticed in the marine species you see?	Many changes	Some changes	Few changes	No changes
33.4	✓	X	✓	X	How many areas that you fish are now depleted?	All areas	Many areas	Some areas	No areas
					Interest in the environment				
34.1	✓	x	x	X	How environmentally sensitive would you say you are?	Very enviro sensitive	Enviro sensitive	Slightly enviro sensitive	Not at all enviro sensitive
34.2	✓	X	x	X	How much would you like to learn about the 'sustainability of the fisheries resource'?	Like to learn a lot	Like to learn	Like to learn a little	Not like to learn at all
34.3	✓	✓	✓	✓	How many ideas would you say you have about how to ensure the sustainability of the main species you catch?	Many ideas	Some ideas	Few ideas	No ideas
34.4	✓	✓	x	✓	Would you say a good fisherman knows a lot or a little about the biology of the main species they catch?	A lot	Some	Little	Nothing

## ADAPTIVE CAPACITY

### Social capital (SC)

Social capital, networks and community cohesion							
35.1	x	✓	✓	✓		When I need help financially or in terms of food or basic needs I ask for assistance from:	Family
							Friends
							Neighbours
							Local organisation
							Take loans
							Other
Gender equity							
36.1	✓	✓	✓	✓		Are any women in leadership roles in this community?	Yes
							No
	✓	✓	✓	✓		What positions do women mostly hold?	(open question)

### Human capital (HC)

Local knowledge							
37.1	✓	✓	✓	✓		List the top three sources of information you regularly consult for information about local fishing and conditions?	(list)
Health							
38.1	✓	✓	✓	✓		Do you have anyone in your house that is or was infirm or needed assistance to undertake daily chores in the past 12 months?	Yes
							No
38.2	✓	✓	✓	✓		Is anybody in your family chronically ill (was very sick for at least 3 months in the last year and could not work or do normal activities)?	Yes
							No
Education							
39.1	✓	✓	✓	✓		What is the highest level of education reached by you	Primary school
							Skills based education
							High school
							University
							Other

Skills							
40.1	✓	✓	✓	✓		Do you have basic skill in any of the following fields	Gardening/horticulture
							Electronics
							Mechanics (e.g. fixing a car)
							Welding
							Emergency first aid
							Other
Knowledge							
41.1	✓	✓	✓	✓		Do you feel you have basic knowledge in any of the following areas	Local environmental issues
							Fish biology
							Local marine issues
							Running a business
							Other
Labour							
42.1	✓	✓	x	✓		Is it easy to find work outside of fishing if you are known to be a fisher?	Yes
							No
42.2	✓	✓	✓	✓		List any community organisations you an active participant in?	(list)

## Financial capital (FC)

Household sharing income							
43.1	x	✓	x	✓		Does each working household member contribute to basic household expenses (electricity, food, water etc)?	Yes
							No
43.2	✓	✓	✓	✓		If you needed cash today for an emergency – would you be able to get that cash?	Yes
							No
Savings							
44.1	✓	✓	✓	✓		Do you have any savings or money put aside for emergencies?	Yes
							No
Debt							
45.1	✓	✓	✓	✓		Do you have a mortgage on your house?	Yes
							No
45.2	✓	✓	✓	✓		How much?	(\$)
45.3	✓	✓	✓	✓		Do you owe money to anyone (aside from a mortgage on your house)?	Yes
							No

Credit						
46.1	x	✓	✓	X	Who/where do you normally borrow money from?	Friends and family
						Small money lenders
						Large companies
						Banks
						Other
46.2	x	✓	✓	X	Have you loaned money to anyone in the last year?	Yes
						No
Insurance						
47.1	✓	✓	✓	✓	What insurance policies do you have at the moment?	Life
						Contents
						House
						Vehicle
						Income
						Boat
						Other

### Physical capital (PC)

Built house						
48.1	✓	✓	✓	✓	Do you own or rent the house you live in?	Own
						Rent
						Other
48.2	x	✓	✓	✓	Age of building?	(years)
48.3	x	✓	✓	✓	Number of rooms	(number)
48.4	✓	✓	x	✓	Estimated value of main building:	(\$)
48.5	✓	✓	✓	✓	Does your house need much renovation and maintenance?	Yes
						No
48.6	x	✓	✓	✓	What is the outside of the house mainly made of?	Concrete
						Concrete block / bricks
						Wood
						Plywood
						Metal/tin
						Thatch
						Coral/Lime
						Other

Household assets							
49.1	✓	✓	✓	✓		What sort of boat do you own?	I don't own a boat
	X	X	✓	✓			Fibre canoe
		✓	x	✓			Aluminium boat
		✓	✓	✓			Outboard Motor boat
	X	X	✓	✓			Dugout
	X	X	✓	✓			Motorised dugout
		✓	x				Ski boat
		✓	✓	✓			Motorized vessel
		✓		✓			Other (please specify)
49.2						For each of the above indicate - Number of boats	(number)
49.3						For each of the above indicate - Size of boat	(metres)
Freshwater supply							
50.1	x	✓	✓	✓		Do you have a water tank?	Yes
							No
50.2	✓	✓	✓	✓		What is your main source of drinking water	Public system only
							Public & community system
							Community system only
							Stand-pipe
							Bottled
							Catchment, drums
							Well/ borehole
							Rain water tanks
							Spring/river
Energy							
51.1	✓	✓	✓	✓		What is your main source of energy?	Power is not connected
							Mains connected
							Solar panels
							Own generator
							Other power sources
51.2	✓	✓	✓	✓		What source of water heating do you have?	No water heating
							Gas
							Solar
							Electric
							Firewood

Cooking fuels						
52.1	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		What is the main source of fuels you use for cooking (tick only one)?
						Firewood
						Gas
						Other
						Electric
Waste						
53.1	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		Do you have your own toilet?
						Yes
						No
53.2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		What type of toilet do you have (tick only one)?
						No toilet
						Flush
						Pour flush
						Long drop
						Composting
53.3	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		What happens to waste water?
						Wastewater disposal
						Waste water treatment
						Septic tank
						Soak pit
						None
						Other
53.4	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		How do you get rid of most of your rubbish?
						Collected
						Hole
						Open burning
						Take it to the tip myself
						Dump outside
						Other

## Natural capital (NC)

Changing resource base						
54.1	✓	✓	✓	✓	Have you noticed changes in your communities' marine resources during your lifetime?	Yes
						No
54.2	✓	✓	✓	✓	What do you believe is the main cause of these changes?	(open question)
54.3	✓	✓	✓	✓	Do you think that the sea habitat in your area is	the same as it always was
						slightly damaged
						badly damaged
						irrecoverably damaged
						improved since you were a child
54.4	✓	✓	✓	✓	What do you think are the factors that cause declines in fish numbers in your area?	(open question)
54.5	✓	✓	✓	✓	What do you think could help to increase the number of fish in the sea in your area?	(open question)
54.6	✓	✓	✓	✓	Do you think your local marine resources are being over harvested at the moment?	Yes
						No
54.7	✓	✓	✓	✓	Have you noticed any changes to your livelihood as a result of changes to the marine habitat	Yes
						No

## ADAPTIVE CAPACITY

### Social Capital - Rating questions

Networks and social capital									
55.1	✓	✓	✓	✓	How confident are you that you can call on someone (friend or family) if you need help financially?	Very confident	Confident	Slightly confident	Not at all confident
Decision making									
56.1	✓	✓	✓	✓	How involved are you in community decision making?	Very involved	Involved	Slightly involved	Not at all involved
56.2	✓	X	✓	X	How involved are you in regional decision making?	Very involved	Involved	Slightly involved	Not at all involved
56.3	✓	✓	X	✓	How involved are you in marine protected area management?	Very involved	Involved	Slightly involved	Not at all involved
Leadership									
57.1	✓	✓	✓	✓	How strong is your community leadership?	Very strong	Strong	Slightly strong	Not at all strong
57.2	✓	X	X	X	Would you say you trust the management of the community to do the right thing by the community?	Totally trust	Trust a lot	Trust a little	Do not trust at all
57.3	✓	X	✓	X	Would you say you trust the community leaders to do the right thing by you?	Totally trust	Trust a lot	Trust a little	Do not trust at all
57.4	✓	✓	✓	✓	How often can you talk to (have access to) a community leader if you need to?	Always	Often	Sometimes	Never
Equity									
58.1	✓	✓	✓	✓	How equal is women's access and control over livelihoods and resources compared to men?	Totally equal	Nearly equal	Quite unequal	Not at all equal
58.2	✓	✓	✓	✓	Would you say that everyone in this community is vulnerable or are some people more vulnerable than others in the community?	Everyone	Most people	Some people	No-one
58.3	✓	X	✓	X	How equal is access to resources in your community?	Totally equal	Slightly unequal	Very unequal	Totally unequal



### Human Capital –Rating questions

Skills									
59.1	✓	✓	✓	✓	Would you say that, with the technology available to the industry now, that anyone or only certain people can be a skilful fisher?	Anyone	Many people	Some people	Very few people
59.2	✓	✓	✓	✓	How confident are you that your skills will mean that you are successful in the industry?	Very confident	Confident	Slightly confident	Not at all confident

### Financial Capital –Rating questions

60.1	✓	✓	✓	✓	How possible is it for you to endure some income shocks if it should occur?	Very possible	Possible	Slightly possible	Not at all possible
60.2	✓	✓	✓	✓	How possible is it for you to access financial reserves if you end up without work for a while?	Very possible	Possible	Slightly possible	Not at all possible

### Physical Capital - Rating questions

61.1	✓	✓	✓	✓	How much money do you owe on your main assets (house – mode of transport)?	Much	Some	Little	None
61.2	✓	✓	✓	✓	How many of the things you own are in good condition and don't need to be replaced anytime soon?	All	Most	Some	None

### Natural Capital– Rating questions

62.1	✓	✓	✓	✓	How diverse (number of species) is the marine habitat of your community?	Very high	High	Low	Very low
62.2	✓	✓	✓	✓	How has the number of fish in the area changed compared to 5 years ago?	Big increase	Increase	Decrease	Big decrease
62.3	✓	✓	✓	✓	Has the marine environment worsened or improved over the past 5 years?	Improved a lot	Improved	Worsened	Worsened a lot

## EXPOSURE (Ex)

### Exposure –Rating questions

63.1	✓	✓	x	✓	Would you say for safety reasons you prefer to work with many boats around whilst at sea?	Many boats	Some boats	Few boats	No boats
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## EXPOSURE (Ex)

Environmental change									
64	✓	✓	✓	✓	Indicate if you have noticed an increase or decrease in any of the following at sea in the past 5 years (tick any that apply)				
64.1	✓	✓	✓	✓	Sea level				
64.2	✓	✓	✓	✓	Rain				
64.3	✓	✓	✓	✓	Wind				
64.4	✓	✓	✓	✓	Air temp				
64.5	✓	✓	✓	✓	Wave height				
64.6	✓	✓	✓	✓	Current strength				
64.7	✓	✓	✓	✓	Rough seas				
64.8	✓	✓	✓	✓	Sea temp				
64.9	x	✓	x	✓	Bottom temp				
Personal exposure									
65.1	✓	X	✓	x	Is your house in an area that is prone to flooding?	Yes			
						No			
65.2	✓	✓	✓	✓	How safe do you feel you are in your main occupation in the context of climatic exposure?	Very safe			
						Safe			
						Somewhat dangerous			
						Dangerous			
						Very dangerous			
Storms									
66.1	✓	✓	✓	✓	Has there been a cyclone/large storm in the last 5 years in your area?	Yes			
						No			
66.2	✓	✓	✓	✓	Were you directly impacted by the cyclone/large storm?	Yes			
						No			

66.3	✓	✓	✓	✓		How bad was the cyclone/large storm damage to your household?	No damage
							little damage
							moderate damage
							major damage
							Catastrophic (property damage & loss of lives)
66.4	✓	✓	✓	✓		Have actions been taken by the household to prevent cyclone/large storm damage?	Yes
							No
66.5	✓	✓	✓	✓		What has been done to prevent damage?	(open question)
66.6	X	✓	X	✓		How many fishing days did you lose due to the cyclone/large storms in the past year?	None
							<10 days
							10-30 days
							1-3 months
							>3 months
<b>Floods</b>							
67.1	X	✓	✓	✓		Does your water source get dirty during heavy rains/flooding?	Yes
							No
67.2	✓	✓	✓	✓		Has there been a Flood in the last 5 years in your area?	Yes
						Yes (go to next 2 question) /No	No
67.3	✓	✓	✓	✓		Were you directly impacted by the Flood?	Yes
							No
67.4	✓	✓	✓	✓		How bad was the Flood damage to your household?	No damage
							little damage
							moderate damage
							major damage
							Catastrophic (property damage & loss of lives)
67.5	✓	✓	✓	✓		Have actions been taken by the household to prevent Flood damage?	Yes
							No
67.6	✓	✓	✓	✓		What has been done to prevent damage?	(open question)
67.7	X	✓	X	✓		How many fishing days did you lose due to the Flood in the past year?	None
							<10 days
							10-30 days
							1-3 months

							>3 months
Drought							
68.1	✓	✓	✓	✓		Has there been a Drought in the last 5 years in your area?	Yes
							No
68.2	✓	✓	✓	✓		Were you directly impacted by the Drought?	Yes
							No
68.3	✓	✓	✓	✓		How bad was the Drought damage to your household?	No damage
							little damage
							moderate damage
							major damage
							Catastrophic (property damage & loss of lives)
68.4	✓	✓	✓	✓		Have actions been taken by the household to prevent Drought damage?	Yes
							No
68.5	✓	✓	✓	✓		What has been done to prevent damage?	(open question)
68.6	X	✓	X	✓		How many fishing days did you lose due to the Drought in the past year?	None
							<10 days
							10-30 days
							1-3 months
							>3 months
Shoreline changes							
69.1	✓	✓	✓	✓		Has the shoreline in your village/area changed over the years?	Yes
							No
69.2	✓	✓	✓	✓		Have you noticed places in your area where the shoreline has been eroded by the sea?	Yes
							No
69.3	✓	✓	✓	✓		How much of the beach has eroded in the last 5 years?	None
							little
							moderate
							big damage
							houses/trees falling down
69.4	✓	✓	X	✓		Have you noticed any changes to your livelihood as a result of shoreline erosion?	Yes
							No

## ADAPTATION OPTIONS (AdOp)

70.1	✓	✓	✓	✓	What will you do if weather conditions continue to worsen or change?	(open question)
70.2	✓	✓	✓	✓	What will you do if it becomes too difficult to find enough fish?	(open question)
70.3	✓	✓	✓	✓	What would you do in the event of a 50% decline in fish catches?	(open question)
70.4	✓	✓	✓	✓	What would you do in the event of market prices dropping by 50% and remaining there?	(open question)
70.5	✓	✓	✓	✓	If you were in charge of the fishing activity in this area what would you do? (2 or 3 changes)	(list)
Climate change institutions						
71.1	✓	✓	✓	✓	Are there institutions or government departments working on climate change or facilitating adaptation to change in the community?	Yes
						No
71.2	x	✓	✓	✓	Which institutions work on climate change or facilitating adaptation?	(list)
71.3	✓	x	✓	x	Do you know of any programs/ projects or other work focused on climate change in the community?	Yes
						No

## ATTITUDE AND PERCEPTIONS OF CLIMATE CHANGE

72.1	✓	✓	✓	✓	Have you ever heard of climate change?	Yes
						No
72.2	✓	✓	✓	✓	Do you think the climate has changed over time?	Yes
						No
72.3	✓	✓	✓	✓	List the top 3 changes in the climate you have noticed?	(list)
72.4	✓	✓	✓	✓	Where do you mainly get your information about climate change? (tick any that apply)	Newspapers
						TV/Radio
						My friends and family
						The internet
						Academic society
						Other



## DETAILED HOUSEHOLD DATA

### General household expenses

Qtn Number	Aus	SA	India	Brazil	W/O	Approximately how much of your household expenses are on the following categories?	
						Expense	\$/week/month/year
73.1	✓	✓	✓	✓		Rent	
73.2	✓	✓	✓	✓		Food	
73.3	✓	✓	✓	✓		Water	
73.4	✓	✓	✓	✓		Electricity	
73.5	✓	✓	✓	✓		School fees	
73.6	✓	✓	✓	✓		Loan repayments	
73.7	✓	✓	✓	✓		Insurances	

### General household items

Qtn Number	Aus	SA	India	Brazil	W/O	Do you own the following?	
						Item	Yes/No
74.1	X	✓	✓	✓		Vehicle	
74.2						Fishing gear	
74.3						Television	
74.4						Gas or electric stove	
74.5						Cell phones	
74.6						Piped water	
74.7						Refrigerator	
74.8						Radio/ cassette player	
74.9						Video/ DVD player	
74.10						Generator	
74.11						Electricity	
74.12						Washing machine	
74.13						Kerosene lamps	
74.14						Electric lamps	
74.15						Solar panel	
74.16						Garden/power tools	

### Household data (start with eldest)

Unique person number	Name	Relation to House Hold	M/F	Age	Marital status	Formal education	Ethnicity	Currently attending school?	Religion	Live/work elsewhere in the past 5 years (76.1)

### Livelihoods (for Adults >15)

Unique person number (from above)	List different livelihood activities and sources of income	Days/ week spent on each activity	Livelihood level (Primary, secondary etc)	Formal or informal sector

### Total income per household per month

Unique person number (from above)	Income per month (cash)	If remittances: Amount of money received per month	Government grants: amount received per month/ year

### Condition of the house

To be filled out by researcher in process of doing interview

### Current condition of building and roof (tick box):

Qtn #	House aspect	Excellent	Good	Fair	Bad
77.1	Roof condition				
77.2	Building condition				



## Community Infrastructure

Indicate if the following infrastructure items are present or absent in the community

Infrastructure	Present	Absent
Hospital		
Medical clinic		
Doctor		
Dentist		
Pharmacy		
Primary school		
Secondary school		
Piped water		
Sewer		
Sewage treatment		
Septic tanks		
Electricity service		
Phone service		
Food market		
Hotel		
Restaurant		
Guesthouse		
Dive shops		
Surf shops		
Motorbike/ bicycle hire		
Curio and craft shops		
Petrol station		
Diesel mechanic		
Fish processor		
Banking facilities		
Paved road		
Slipway		
Tsunami early warning system		
Flood warnings		
Lighthouses		
Public transportation		
Recreational boating jetty		
Marine safety facility		
Others		