

Summary of Responses to the National Mud Crab Pre-workshop Survey 2022 (FRDC Project 2018-177)



Survey Results

As part of prepping for the upcoming workshop all participants were asked to complete a SurveyMonkey questionnaire to assist in developing the workshop design and program by providing an initial feel as to which areas are important for them.

27 invites to participate were sent out and we received a remarkable 23 responses so we feel that we have achieved a good cross section of feedback from participants.

We thank you and appreciate the level of detail that participants have provided, and each and every point has been captured and is included in this survey report. We have attempted to aggregate like ideas with like to allow a higher level focus at some workshop sessions.

Following are those results. Please take the time to read through before the workshop.

Regards and see you on the 12th October 2022

Background to project

The project idea is quite simply to bring together, as equals, representatives from the national mud crab industry (researchers, managers, fishers, owners and marketers), together from across Australia to build a more coordinated approach to developing and managing this fishery nationally.

The bringing together of Industry members and Agency people from across Australia to discuss the fishery from a national perspective will be the first of its kind, and can hopefully

lay foundations for a more coordinated and successful fishery with clearer direction. The key objectives are to:

- Share experiences and understandings and to identify issues and opportunities for collaborative approaches across the industry and agencies
- Build industry cohesion and capacity through development of a national industry plan and communication network.

Key outcomes will be increased knowledge, connectivity and directions. It is felt that without a formalised plan it will be near on impossible for the Australian industry to clearly plan and manage where to target and focus its attention. The development of a national plan can provide critical direction for R&D investment, operational considerations and potential direction for industry marketing.

Importantly Industry experience shows well organised and managed programs lead to industry betterment, whilst ad hoc approaches are highly unlikely to give optimal outcomes.

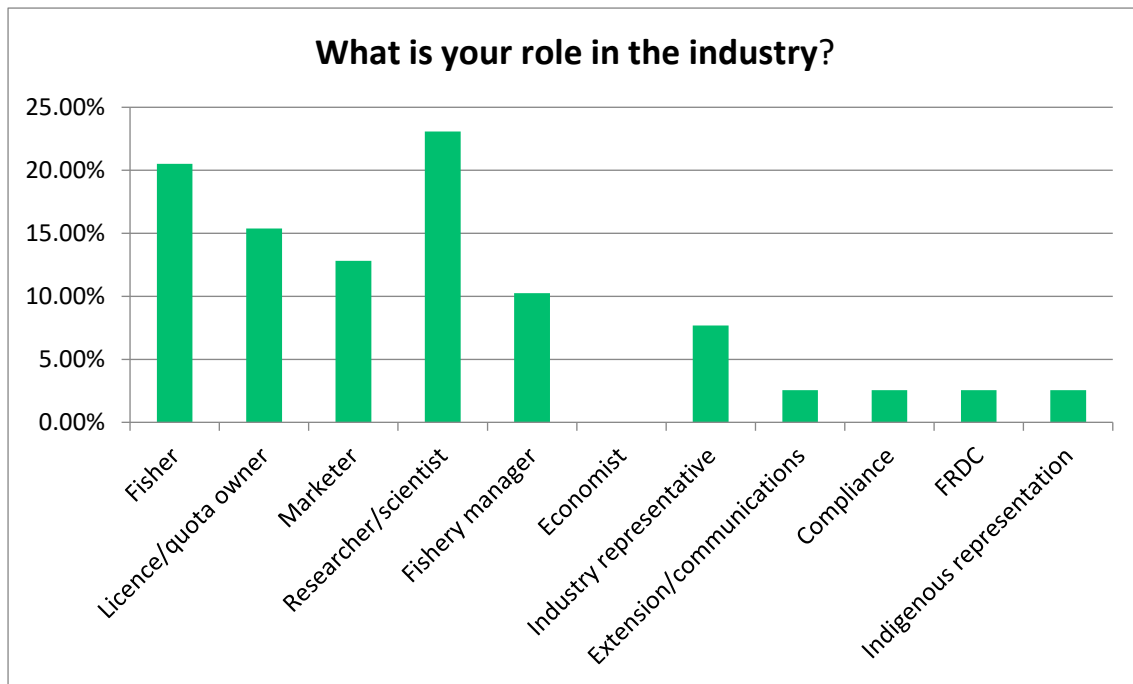
A range of Industry members, groups and agencies have been part of a number of R&D projects, but there has been no attempt to develop a coordinated approach to industry improvement, and a well-structured plan should allow this to happen whilst minimising waste.

Further, Industry ownership of the outputs, developed in conjunction with Agencies, will increase uptake and an adopted plan should provide clearer direction for investment and directed research leading to improved performance for Industry, policy makers, R&D providers, funders and consumers.

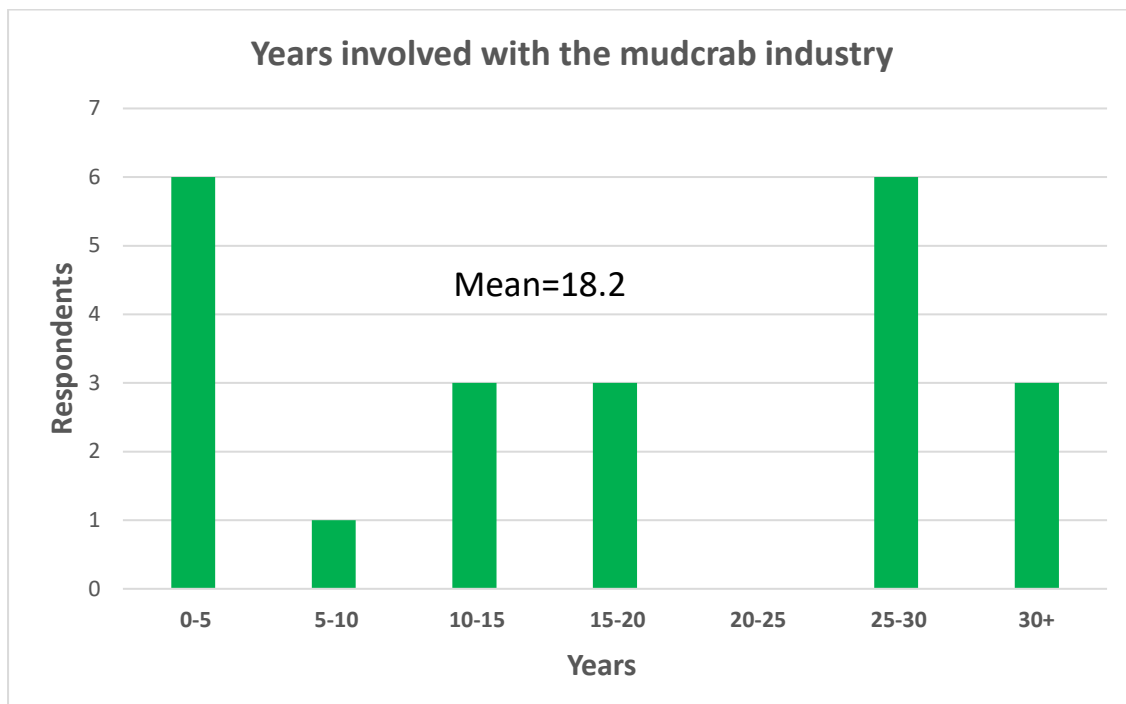
Post workshop there will be a draft plan developed based on the workshop outputs.

Dr Chris Calogeras and Dr Rik Buckworth

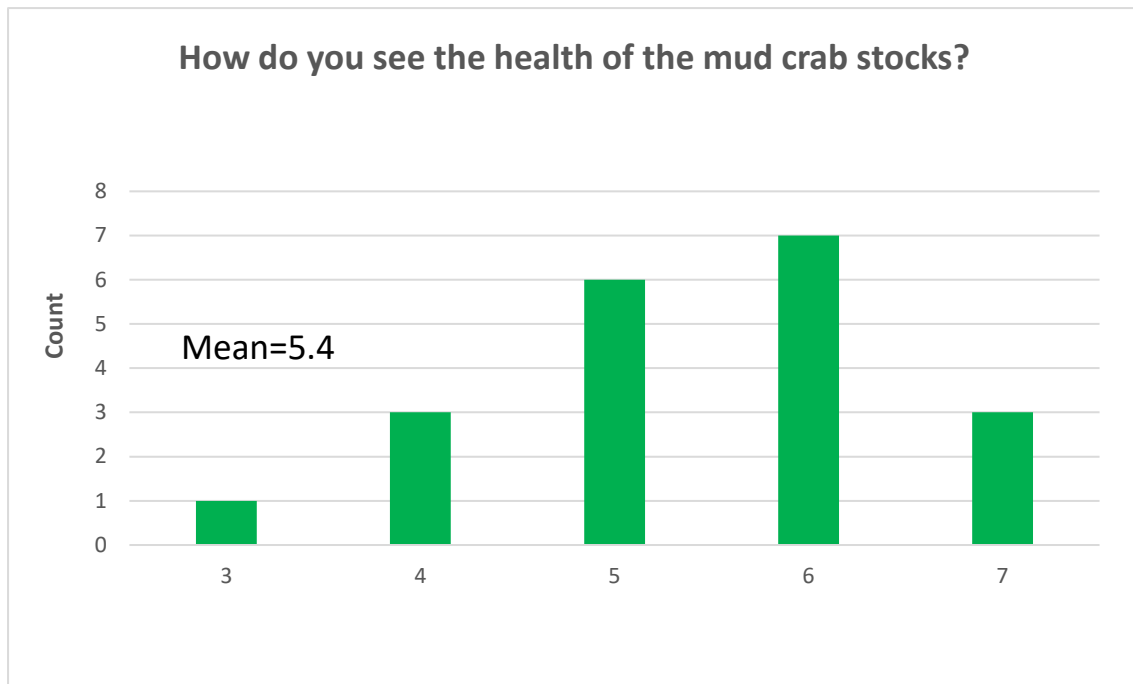
Q1: What is your role in the industry? (tick multiple boxes but please focus on your key areas)



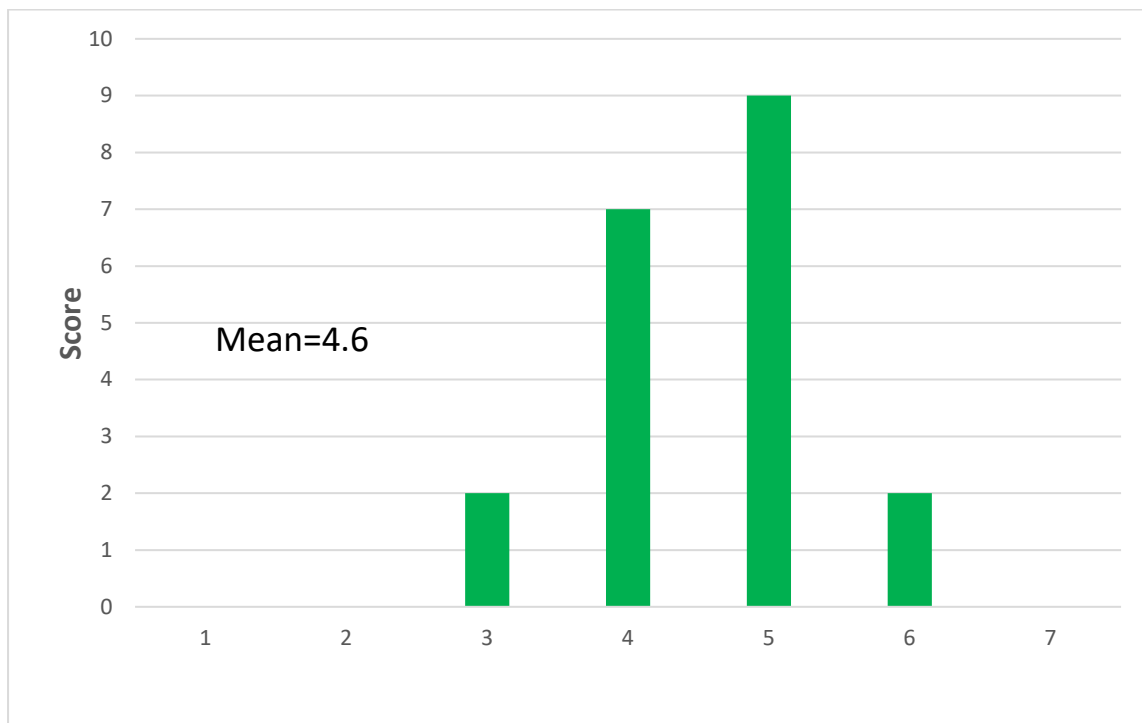
Q2: How long have you been involved in the mud crab fishery?



Q3: How do you see the health of the mud crab stocks in the fishery?



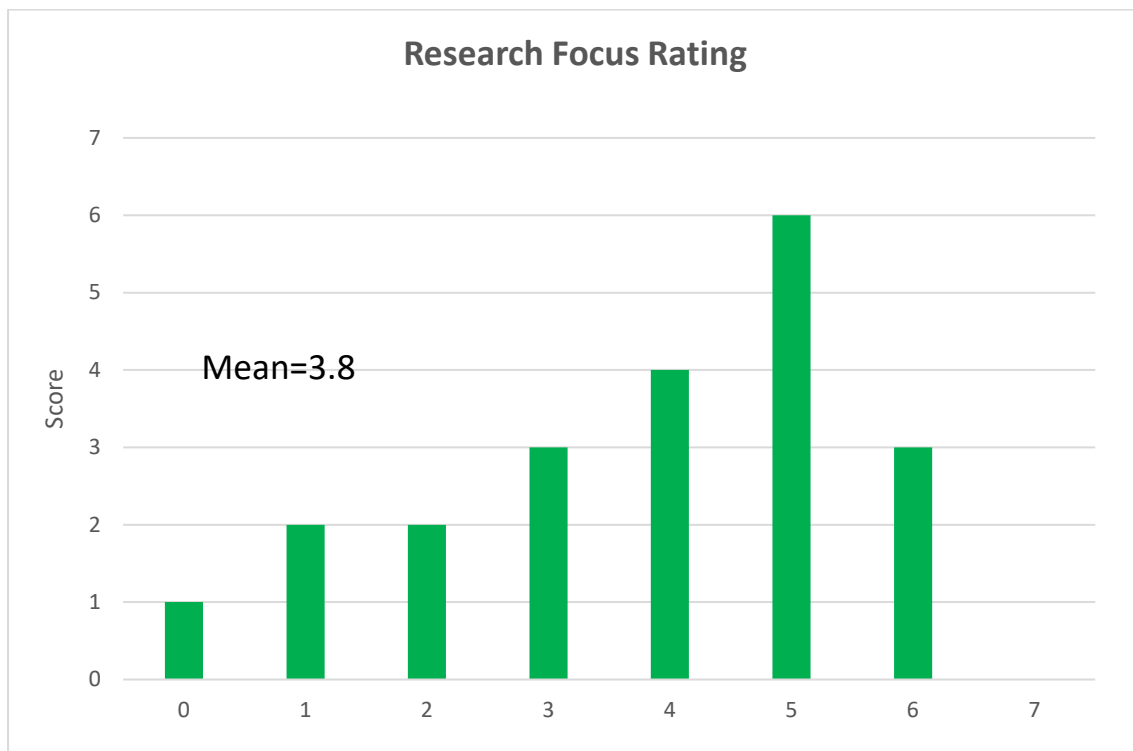
Q4: How do you see the overall quality of the markets?



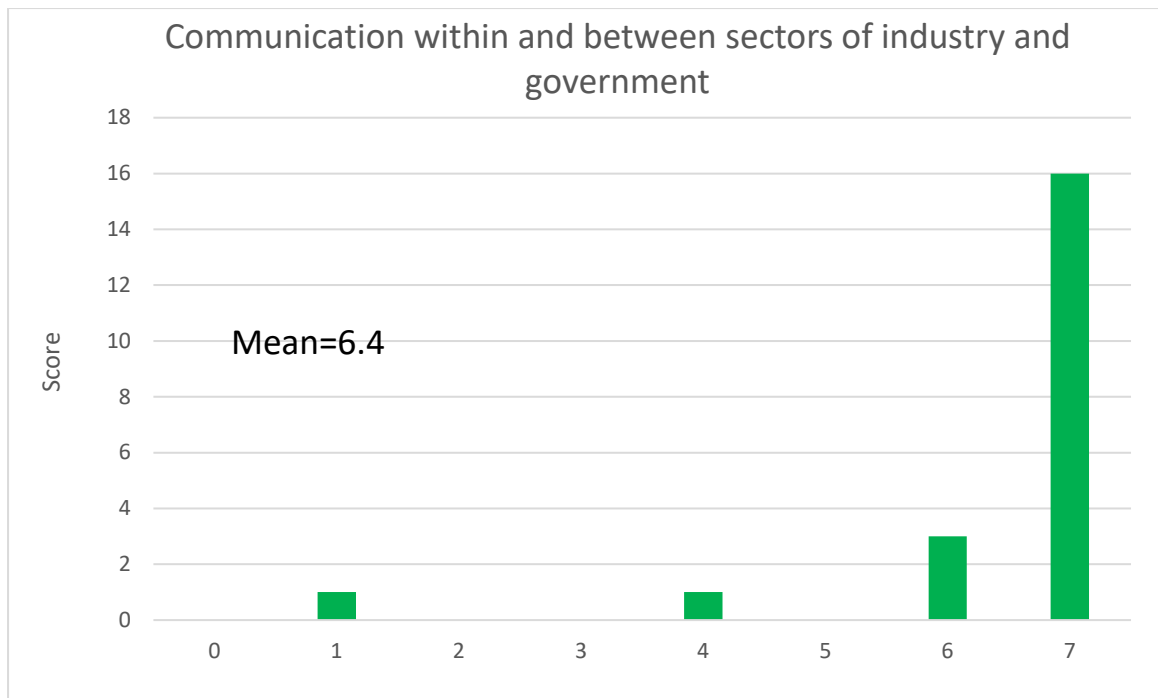
Q5: What rating would you give for the overall management of your fishery?



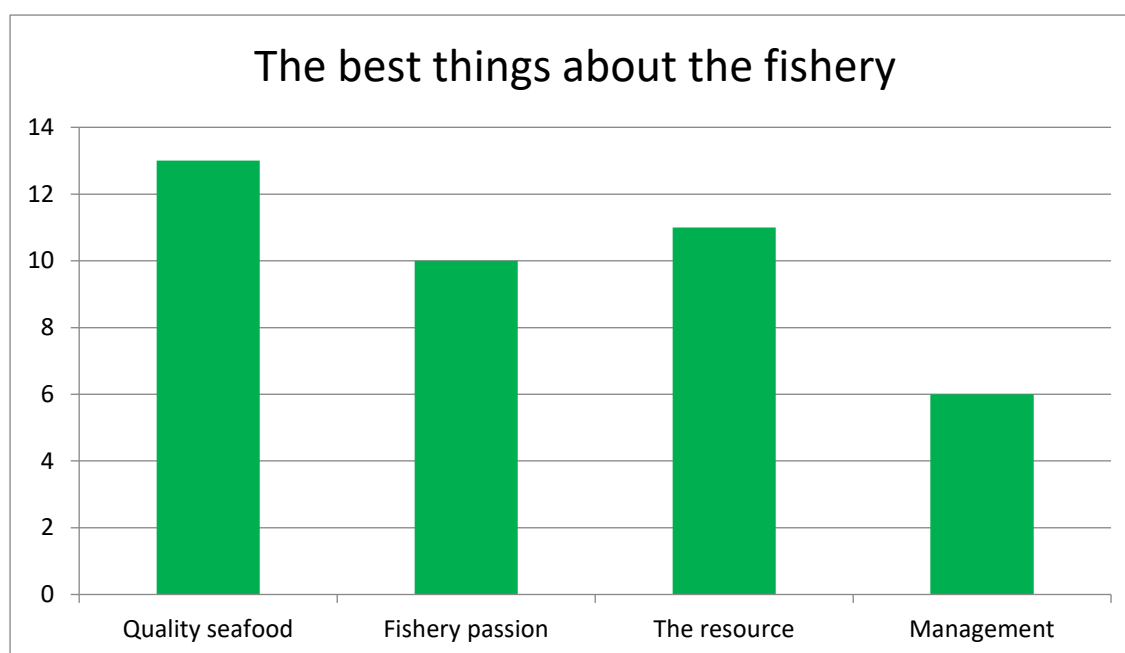
Q6: How well is research addressing what you see as important in the fishery?



Q7: How important is communication within and between sectors of industry and government?

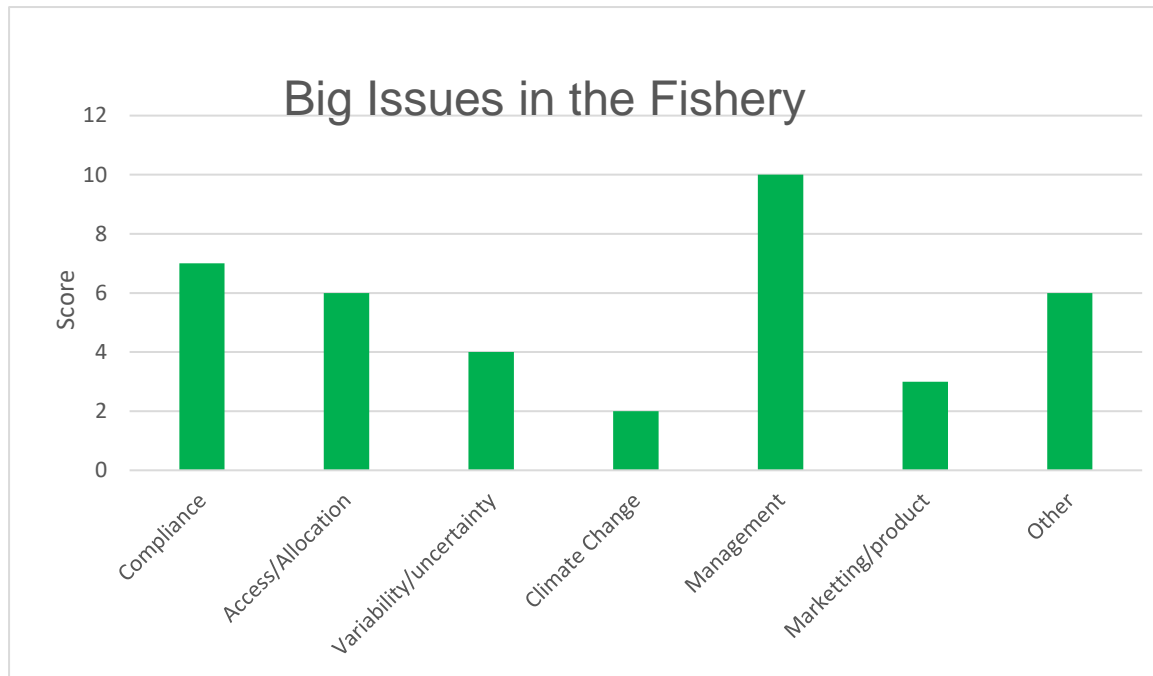


Q8: What are the best things about the fishery? (write down up to two things below)



Quality	Fishery Passion	The Resource	Management
Large Variety Of Markets, Local, Interstate, Private Buyers, Direct To Public	Every Day Is The Challenge And Changes Every Day	Low Impact	Management Largely In Place To Support Fishery Into The Future
High Value Product	Flexibility To Work 60, 90, 120 Pots Etc..	Resilience	Potential Economic Opportunities For Aboriginal People
Has Great Potential For Increased Value	Iconic Species, Loved By All Ethnic/Customer Groups	Resilient Stocks	Fully ITQ managed
CUC When It's Not Being Incorrectly Assessed By Compliance Officers	Passion	Sustainability	Harvest strategy backed up by stock assessment
Is Based On A High Value Product So Don't Need Large Tonnages	People	Very Resilient Species As Productivity Is Driven By The Environment	Very low fishing effort allocation
High Value Product Consistently Demanding High Prices.	Profitability	Sustainable	Minimal Fisheries Management or Enforcement
Quality Product	Profitable (Or Should Be)	Low Impact	
High Value	The Crabbers	Pristine Environments	
Satisfaction Of Supplying A Quality Product	Your Own Boss And Work Flexibility	Capacity For Expansion	
Premium High Value Product	Passion And Enjoyment Of My Fishery	Long-Term Stability In Catch And Catch-Rate	
Contribute Fresh Produce To Australian Seafood		Abundance	
Increase In Sales.			
High Value Product			

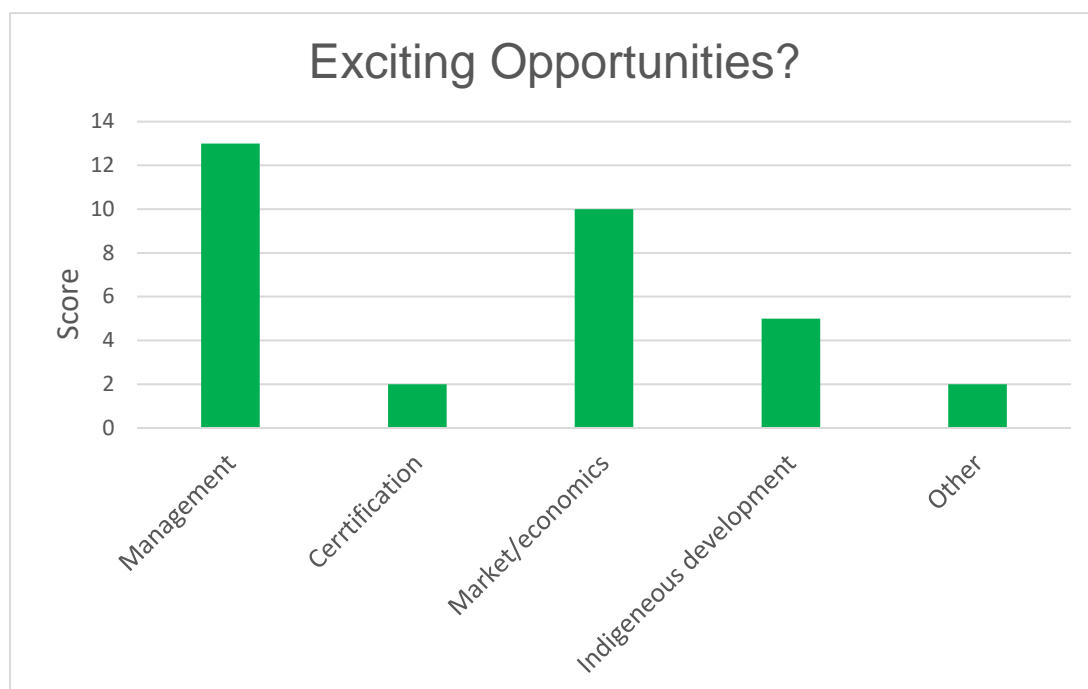
Q9: What are the biggest issues in the fishery? (write down up to two things below)



Compliance	Climate Change	Access Allocation	Variability Uncertainty	Management	Marketing Product	Others
Black Market	How Climate Change Will Impact Fishery	Access And Allocation Amongst Stakeholder Groups	Modelling Uncertainty	Industry Issues And Concerns Are Given No Credence And Disregard For The Fact That We Do Actually	Market Driven Pricing Of Product and Inconsistency - But Many Operators Do Not Want A Uniform Price, As Retained Product Not Uniform In Standard	Recruiting Young Fisher
Trap And Crab Theft	Climate Change Impacts	Access	Lack Of Region Specific Biological Info (Eg NSW	Improve Quota	Market	Language Barrier

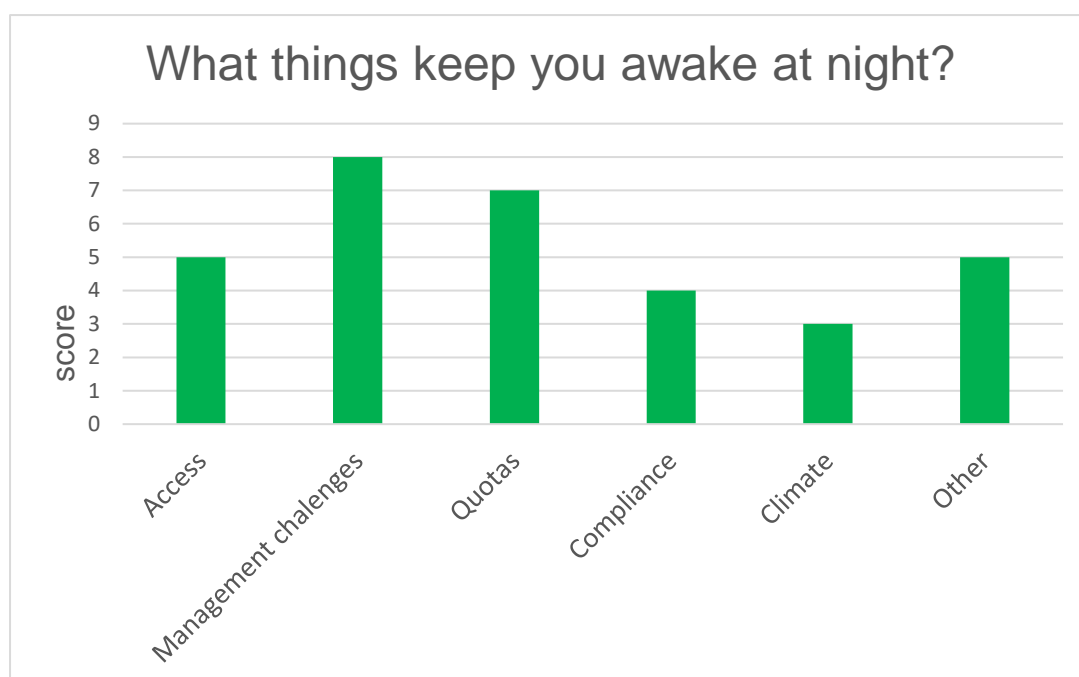
Compliance	Climate Change	Access Allocation	Variability Uncertainty	Management	Marketing Product	Others	
Illegal Fishing And Sales		Uncertainty Around S19 Access Arrangements	Lack Of Recreational Data	Structural Adjustment Reforms	Fluctuations In Price	Logistically Difficult To Fish, Isolated/Remote	
Theft		Access To Managed Species As Bait Provided By Commercial Barra Fisher	Difficulty In Forecasting Fishery Performance	Institutional Incapacity To Manage The Variability In The Fishery		Remoteness	
Theft / Interference With Pots		Marine Parks And Stakeholder Conflict/Uncertainty		Heavy Fishing Pressure In Some Areas Leading To A Downwards Spiral In Effort ~ Catch		Lack Of Trust In Industry And Poor Data From Some Stakeholders.	
Trap Theft/ Black Marketing				Potential To Over Fishing Localised Areas			No Limited Season For A Year
Taking Soft Crab				Know What We Are Talking About. Disregarded By Management			
				Too Much Effort (Qld)			
			Lack Of Regulatory Certainty				

Q10: What exciting opportunities do you see for the fishery?



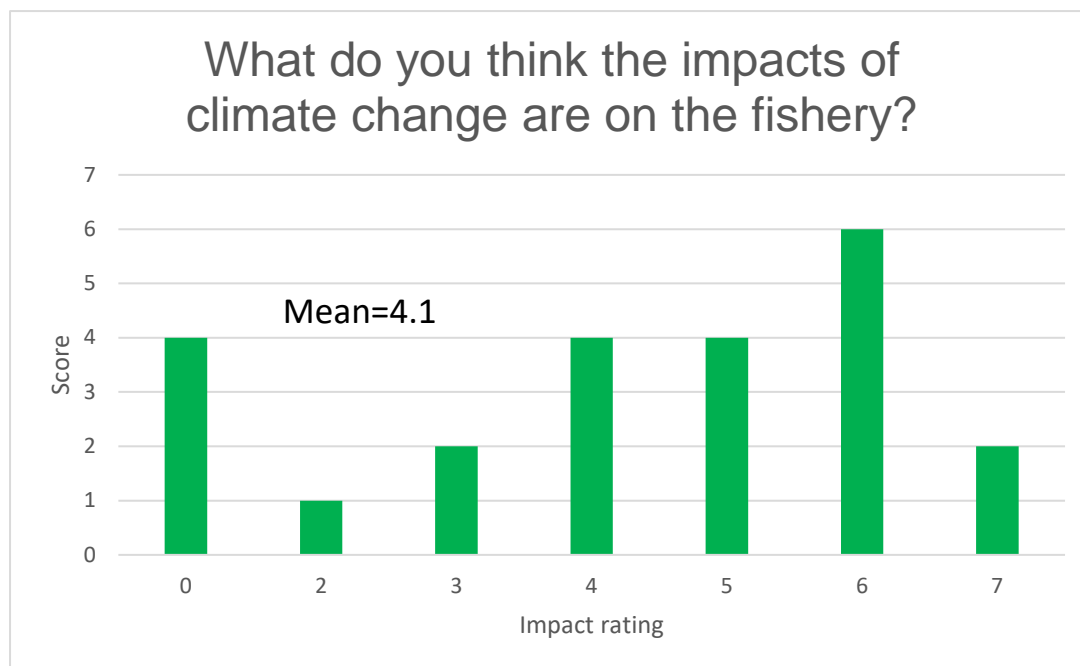
Management	Certifications	Market Economics	Indigenous Development	Other
Effort Reduction From Quota	MSC	Consolidation Leading To Increased Profitability	Aboriginal People Getting Into The Commercial Mud Crabbing Industry	Building Social Licence
Tagging Program To Reduce Illegal Sales	3 rd Party Certification	Improved Marketing	Establishment Of The Aboriginal Sea Company	Stocking
The Need For Better Management And A Management That Listens To Fishers What’s Needed		The Need To Market Our Product Better For A Better Price We Need Government Assistance To Do This Fisherman Can’t Do It Alone	Development Of Indigenous Fishing Through Future 600 Trap Allocation	
Less Volume Should Lead To Better Grading & Prices		Co-Operative Marketing	Commercial Fishers Aligning With Indigenous Seafood Company Aspirations	
Electronic Reporting		Enhanced Value All Along The Catching And Selling Chain	Aboriginal People Being Included Within The Fisheries Management	
Better Addressing Bycatch Concerns		More Value-Adding To Product		
Inter-Jurisdictional Management/Assessment		Growth Of Profitability		
Fully Sustainable Fishery		Development Of Commercial/Economic Environment		
Taking Advantage Of Good Wet Seasons With Higher Catches		Growth Of Marketing		
Industry Growth To Allow Sustainable Supply To Public		Opportunity To Market Through Online Platforms		
Improved Connectivity		Market Growth Ie Price		
Opportunity To Develop Data Collection Programs To Support Rigorous Assessments				

Q11: What things about the fishery keeps you awake at night? (write down up to two things below)

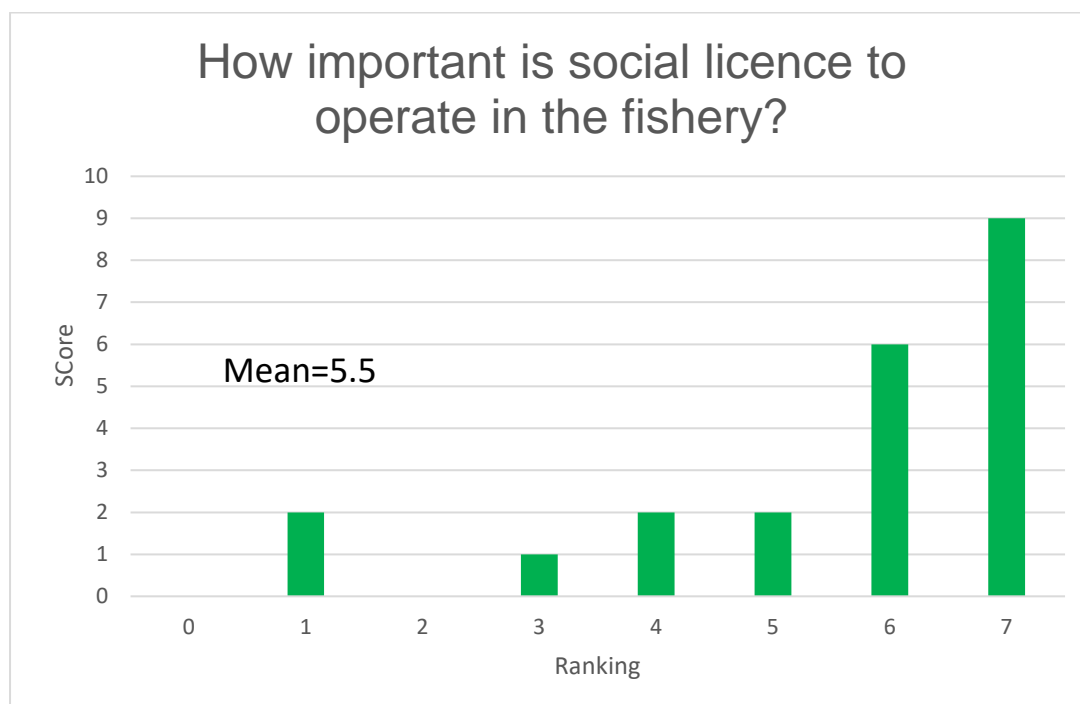


Compliance	Access	Management	Quotas	Climate	Other
Crab And Trap Theft	Access And Allocation Amongst Sectors	Investment Required To Fill Critical Knowledge Gaps	NSW DPI Not Managing Fishery Properly , Re Closures	Weather	Mental Wellbeing
Illegal Fishing	Access	Ill Informed Management	Security Of Tenure Ie Quota Allocation	Potential Impacts From Climate Change	Access To Skilled Workforce
Ghost Pots	Access To Fishing (Crabbing) Ground	Uncertainty And Changing Management Regulations	Quota Value And Trading	Climatic Impacts	Remoteness
Theft	Marine Parks And Exclusion Zones	Professionalism Of The Commercial Sector	Setting A Responsive TACC		Dickhead Operators (Lessees)
	The Uncertainty Of Our Future As Queensland Fisherman	How To Overcome Difficult Conditions (Remote, Market Development Etc) To Develop The Fishery To Its Full Potential	The Government Issued Quota But They Have Their Finger On The Dial They Can Reduce The Value Of Our Quota For The Strike Of A Pen		Prices Dropping Due To The Economy
		Potential Changes In The Regulatory Environment	Developing A Defensible TAC Approach For Catch Quota Fisheries		
		Lack Of Consistent Fishing And Investment Into The Fishery	Large Quota Holdings Of Investors		
Commercial And Recreational Conflicts					

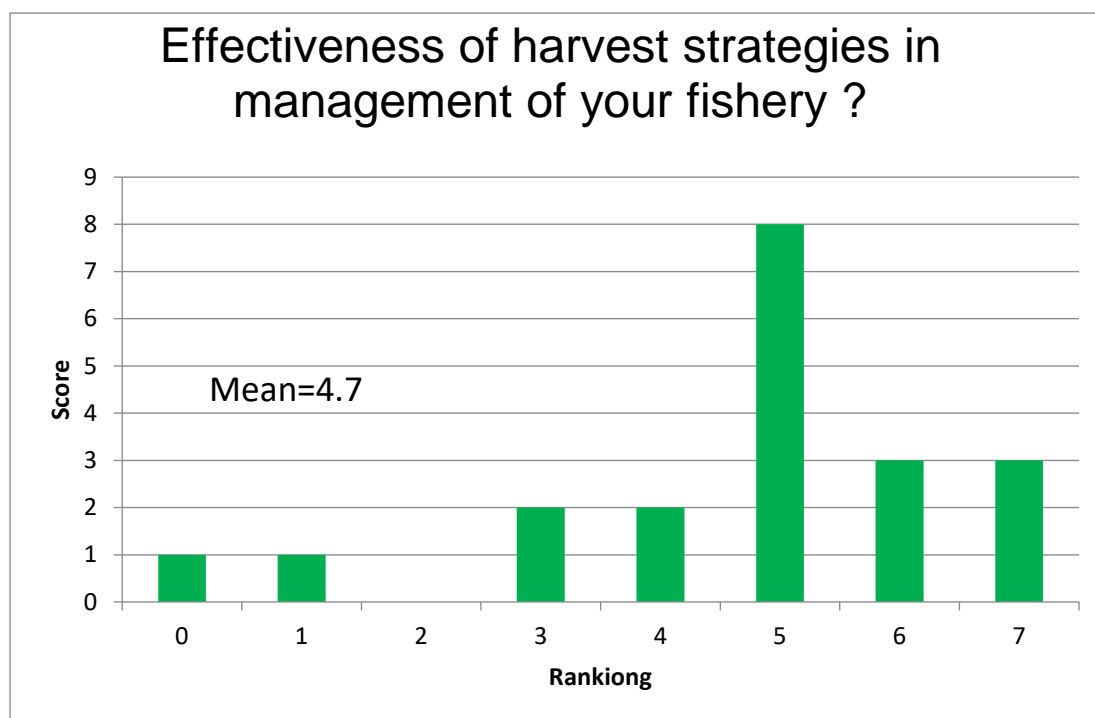
Q12: What do you think the impacts of climate change are on the fishery?



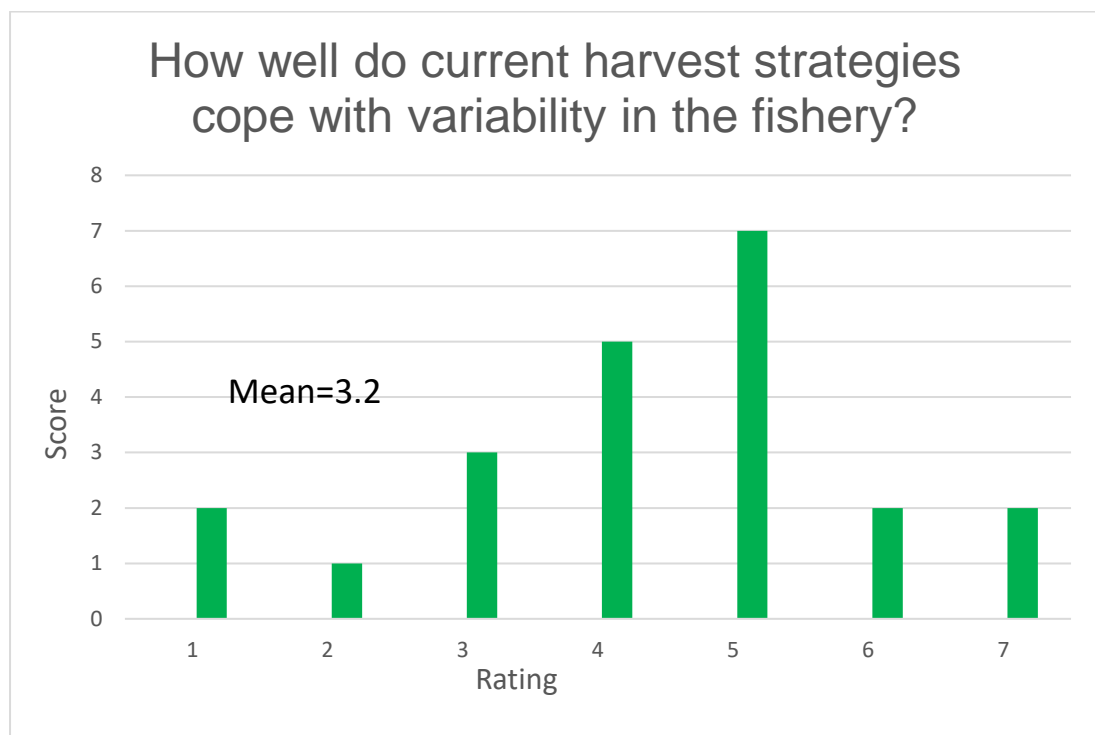
Q13: How important is social license to operate in the fishery?



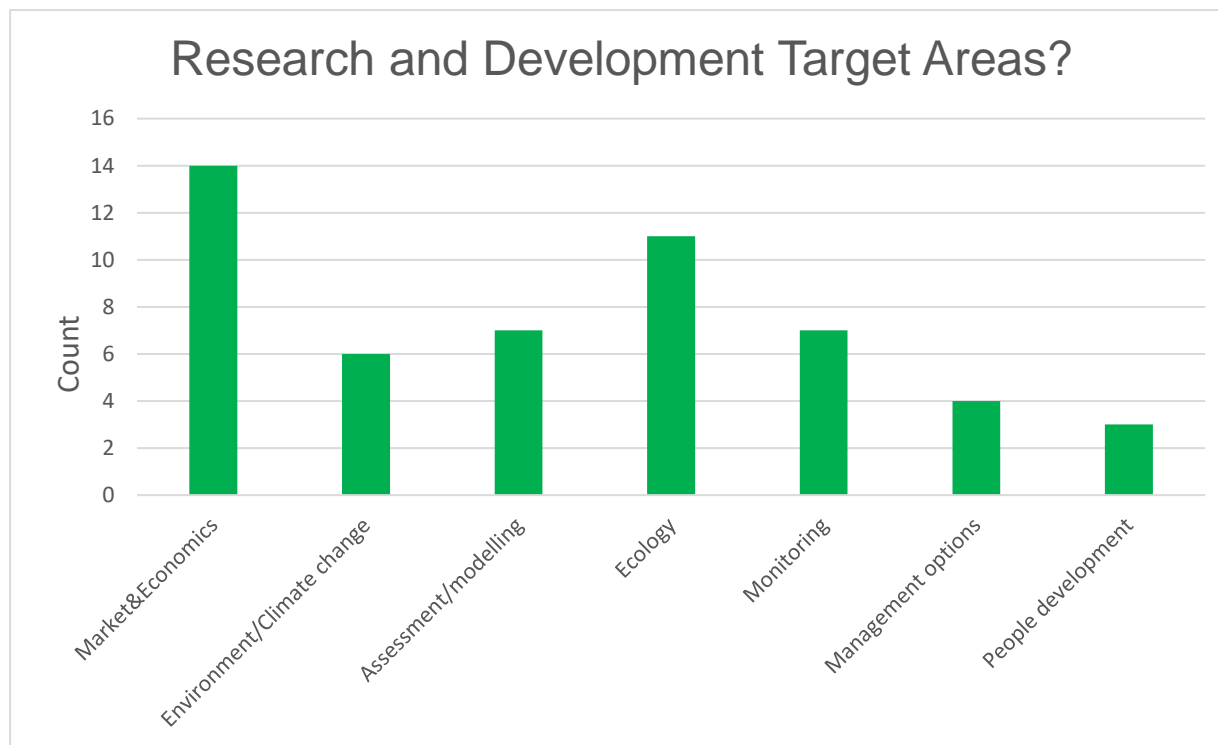
Q14: How effective do you think the use of harvest strategies are to manage your fishery?



Q15: Do you think the current harvest strategies cope well with variability in the fishery



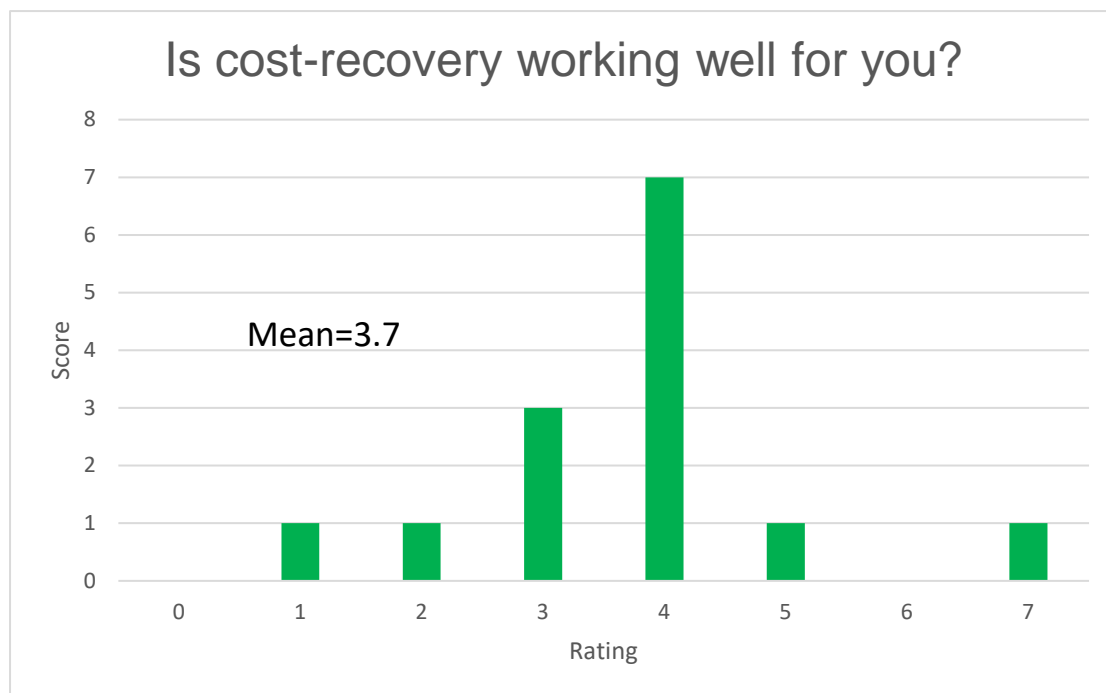
Q16: Where would you target research and development if it was up to you?



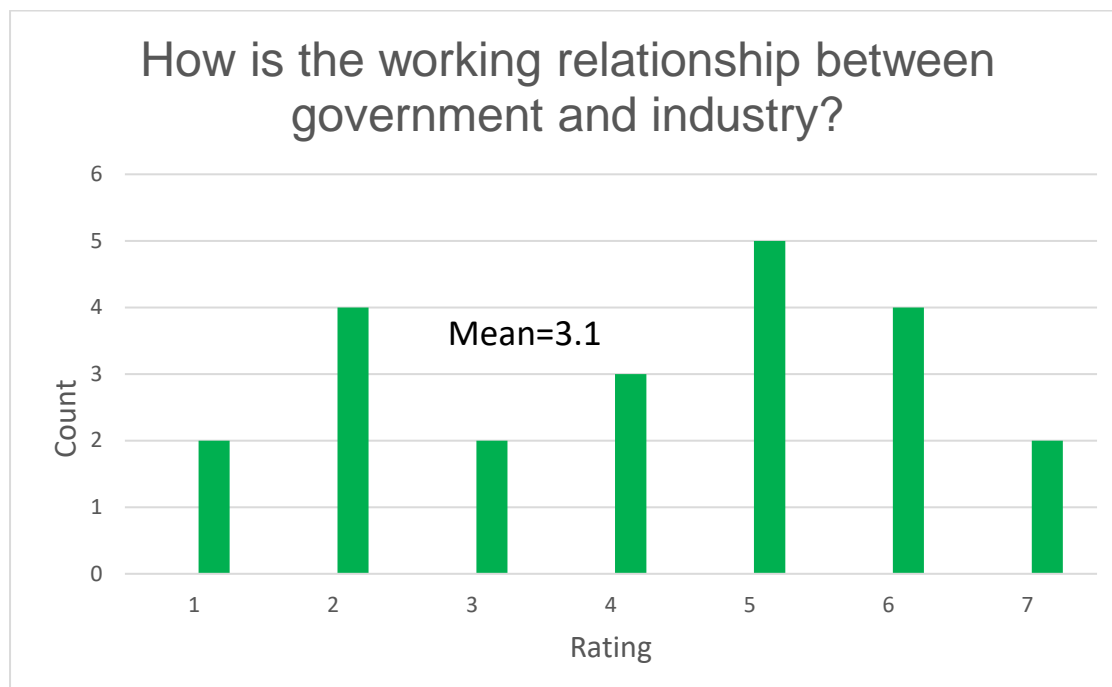
Market Economics	Environment Climate	Assessment Modelling	Ecology	Monitoring	Management Options	People Development
Development Of New Improved Markets	Vulnerability To Climate Change	Extensive Modelling Of Fishery, Environment And Management Scenarios	Better Understanding Of Fishery Recruitment	How Can Fishermen Provide Quality Monitoring Information	Application Of Same Standards Regulated For The Commercial Fishery To The Recreational Fishery	Development Of Skilled Workforce In Remote Communities
Increasing Market Value Of Product	Linkage Between Seasons	Confirming Stock Abundance And Spatial Distribution	Better Understanding Of Stock Structure And Influences	Electronic Reporting	Would It Be Wise To Harvest Female Crabs In Qld	Indigenous Fishing - Opportunities To Expand
Better Packaging And Handling Methods	Climate Change Adaptation	Stock Assessment	A Complete Review Of The Biology (Any Changes From Historical Estimates).	Improved Recreational Catch Monitoring & Management	Understanding The Potential For Stocking	Increased Social Licence & Local Community Support For Commercial Crabbers

Market Economics	Environment Climate	Assessment Modelling	Ecology	Monitoring	Management Options	People Development
Development Of Supply Chains And Markets, Overcoming Logistics	Impacts Of Climate Change	Localised Stock Assessments	Spawning And Recruitment	Estimation Of Recreational Catch (Higher Precision, Accuracy Than Current Program	Developing A More Professional Commercial Fishery	
Extension To The Current NIR Fullness Project 2018-089 To Include All States	Incorporating Environmental Drivers Into Harvest Strategies	Stock Assessment	Life Cycles	Enhanced Knowledge Base (Real Not Just Perceived) Of On-Water Crabbers		
Revisit Workshops On Handling Training	Climate Change Effects	For Qld To Take Larger Female	Understanding The Range And Interactions Of Our 2 Species	Determining The Effort And Catch Of Other Stakeholders Leading To Mandatory Catch Reporting = More Robust Harvest Strategy.		
Research Into The Effect The Different Fisheries In Each State Have On The Other Fisheries In Each		Impact Of Increasing Amateur Effort On Stock	Region Specific Basic Biology (Eg. Growth, Size/Age At Maturity)	Electronic Reporting Apps To Support Fisher-Collected Data Programs (I.E., Icalliper App Used In WA Crystal Crab Fishery). Allow Collection Of Additional Data (I.E., Grades Kept, Undersized Crab Caught Etc) To Support Stock Assessments At Low Cost To Industry.		
Tagging Program			Spanning When And Where	More Field Sampling And Biomass Estimates		
Escape Vents / Bycatch Reduction			Mortality Mitigation In Hot, High Tidal Areas			
Understand Market Opportunities for Aboriginal Owned Operated Business			Life Span			
Tool To Determine The Meat Content Of A Male Mud Crab						
Optimise Marketing						
State						
More Work On Handling Practices To Minimise Crab Deaths In Holding And Transport To Market						
Quality Control						

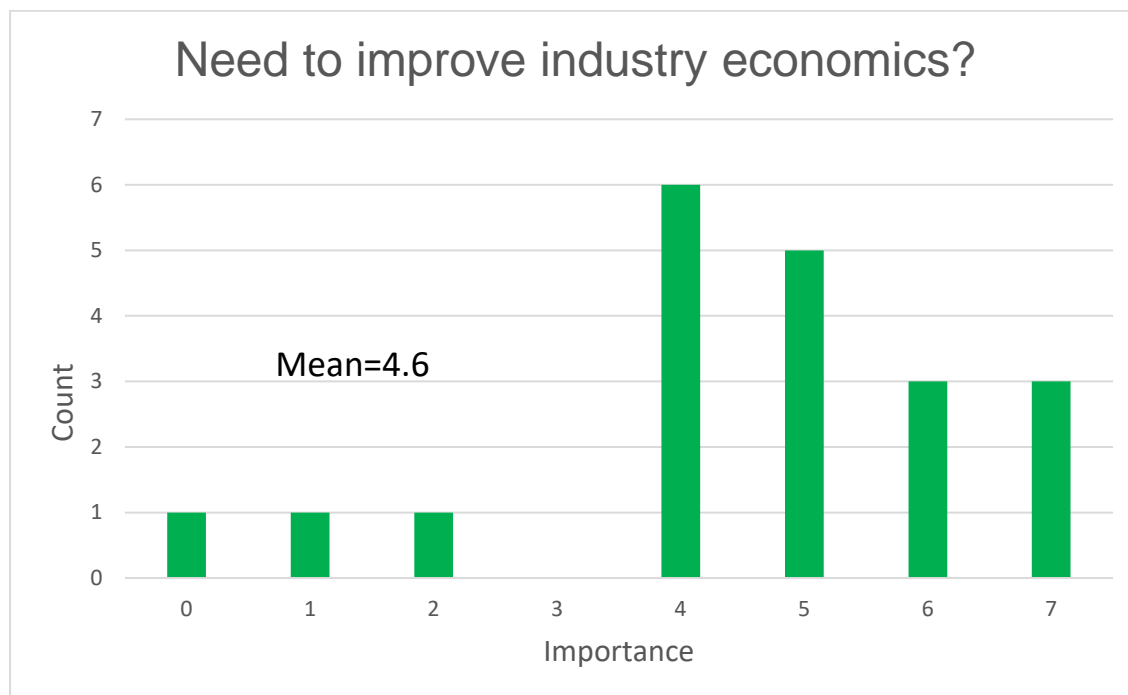
Q17: If your fishery is cost recovered, is that working well for you?



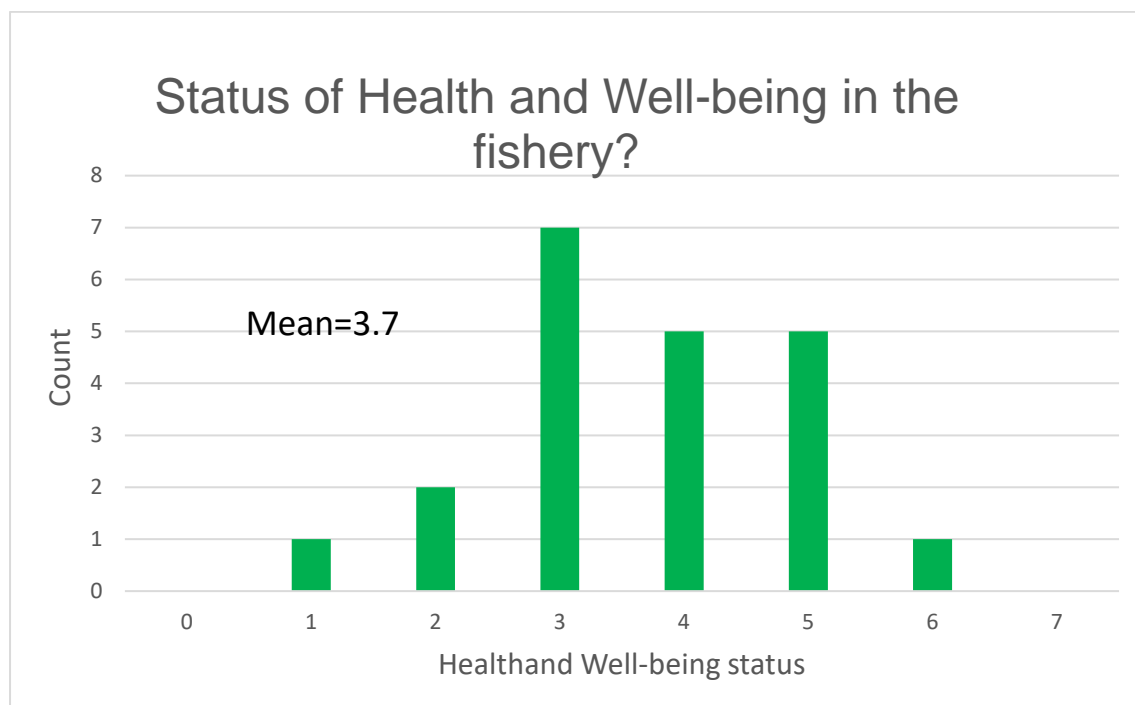
Q18: How do you see the working relationship between government and industry?



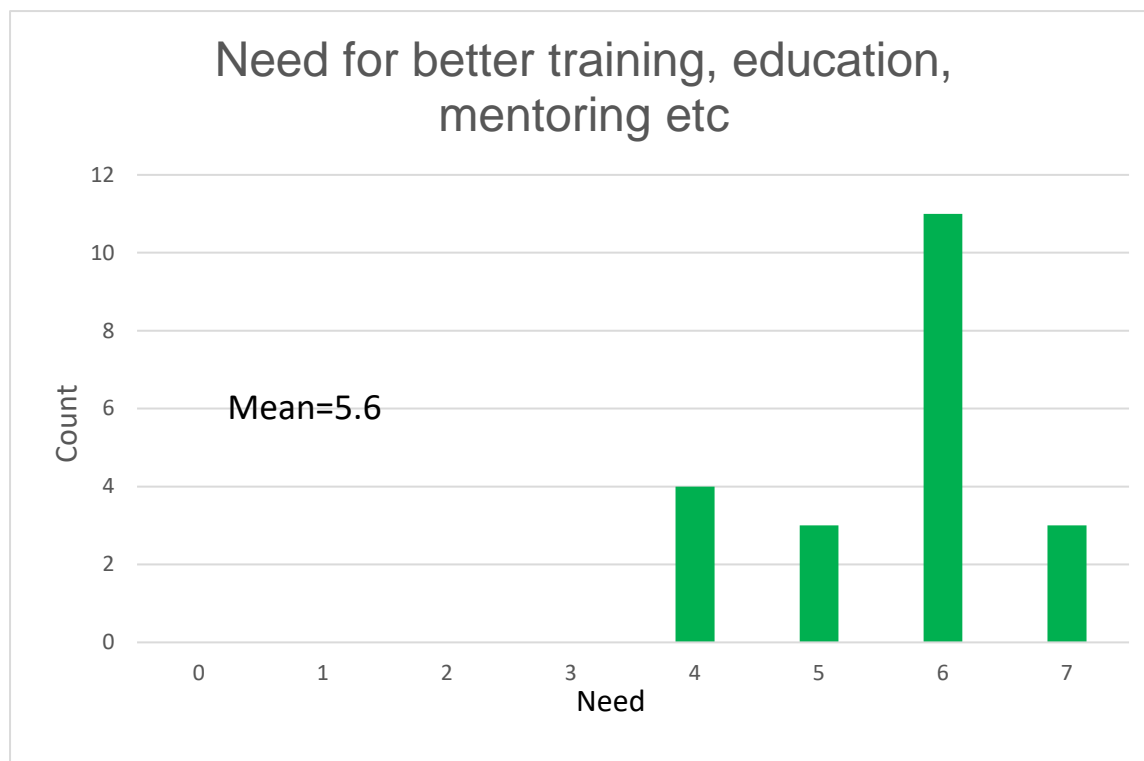
Q19: Is there a need to improve industry economics? (Examples are marketing plans, supply chain, fishing methods, new products, branding, certification)



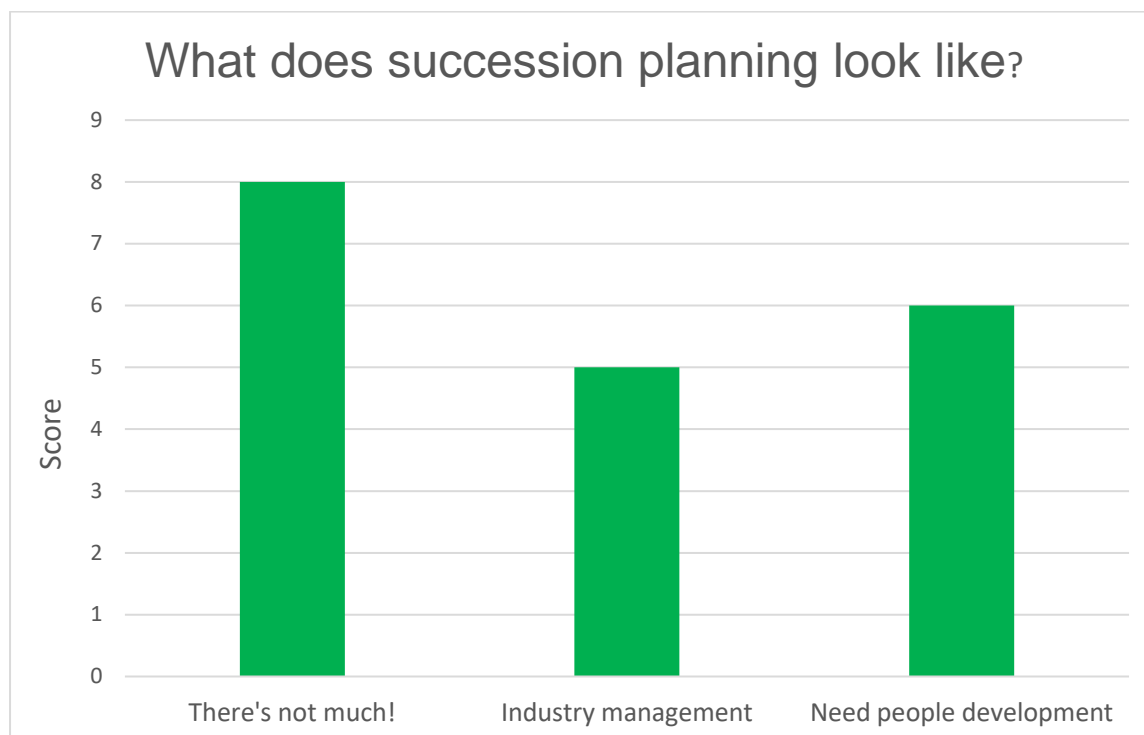
Q20: What is the status of the health and well-being of those people involved in the fishery (across all sectors)?



Q21: Is there a need for better training, education, mentoring etc in the fishery?

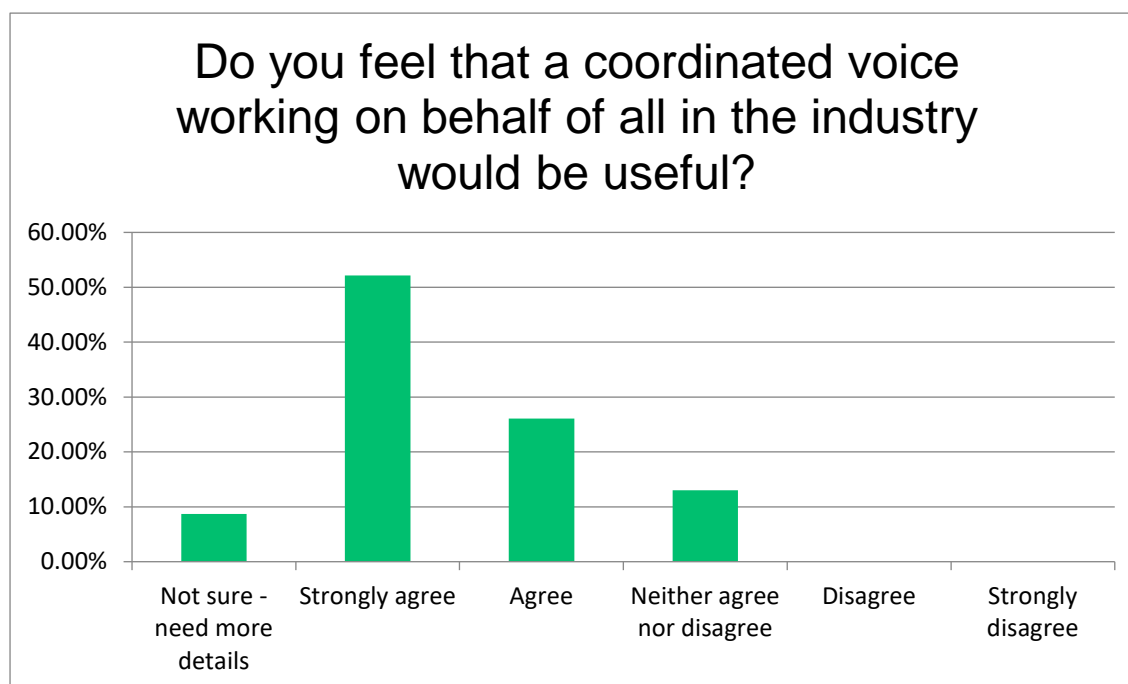


Q22: What does succession planning look like to you? (type your thoughts below)

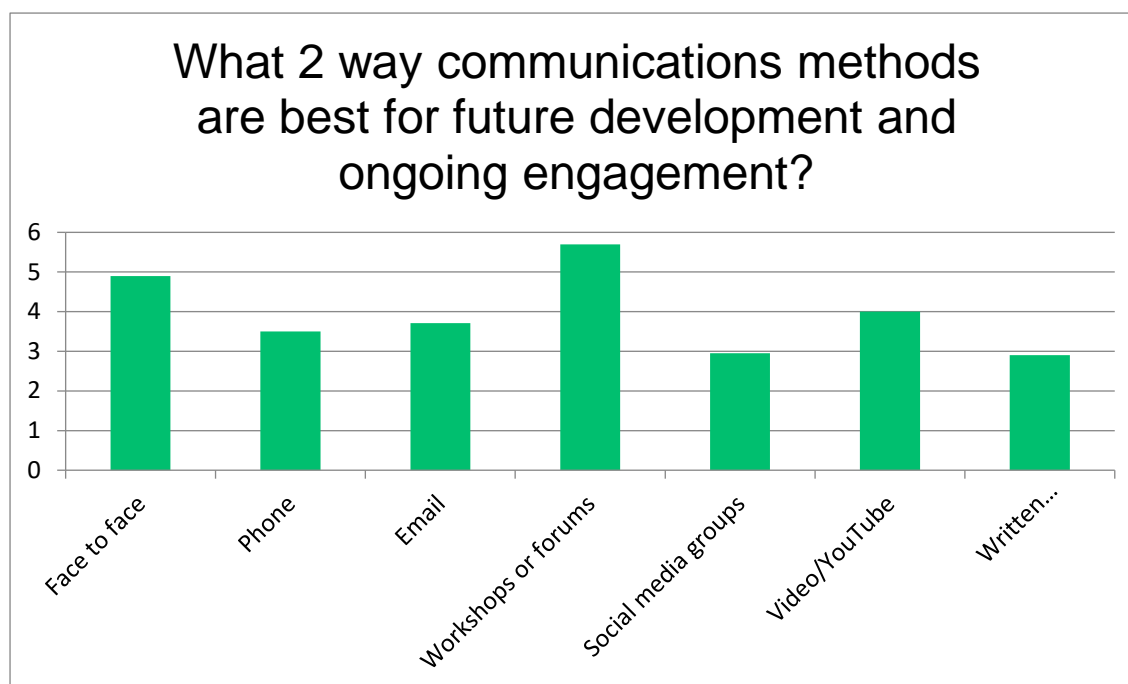


There's Not Much	Industry Management	People Development Programs
I Doubt Any Of My Immediate Family Will Take Up Commercial Fishing. That Being The Case, I Will Sell Up When I Am Over Being Involved With The Commercial Mud Crab Fishery	Important Especially To Identify Critical Stages Of Potential Risks Within The Fishery. Planning For Future Generation	Develop Capacity Across All Sectors To Communicate With Each Other -Develop A Community. Build Business Skills And Knowledge Of Fishery Management Approaches.
Not A Lot Of Succession Planning Coming On	Getting More Professional Fishers To Buy Out Current Licence Holders (Not All But Most)	Increase Aboriginal Participation Across Remote Areas. More Promotion And Training In Schools
Not Sure What Is Meant By This Question? Do You Mean From One Fisher To The Next Generation? 2 Of The Commercial Fishers Have Not Fished The Stock But Have Leased Traps To Others As Business Propositions. Only 1 Long Term Fisher Family Operating. Traps Not Yet Allocated To Indigenous Fishers	Fewer Part-Time Participants; Greater Proportion Of Serious, Skilled Fishers Who Fish Efficiently With Less Bycatch And Invest In Value-Adding And Stewardship.	Developing Actions To Make The Fishery And Industry As Best As It Can Be
Not Good, Not Too Many Young People Want To Work Hard	A Broader Base For All Sectors From Catching To Compliance	Need To Encourage Young Blood And Train Them.
Most Current Operators Are Middle Aged Or Older, With Few Younger Participants. Some Operators Have Expanded To Include Their Children, Eventually Passing The Business Over To Them.	Important To Ensure Skilled Catchers Remain In The Industry	Providing The Next Generation With Opportunities To Learn About Their Fishery But Also Beyond That To Enable Them To Develop A More Informed Picture Of Fisheries Management Around The Country. Provide Them With Opportunities To Build Networks Within And Outside Their Fishery Eg Participating In Committees That Are Directly And Indirectly Related To The Fishery, Mental Health And Sea Safety Programs, NSILP Etc
Not Much Planning. Quota Has Led To Concentration Of Ownership & Some Corporatisation		Industry Leaders Recommending And Driving Improvements In The Fishery.
Poor In NSW Wakes At The Current Time		
When I Finish No One To Take Over		

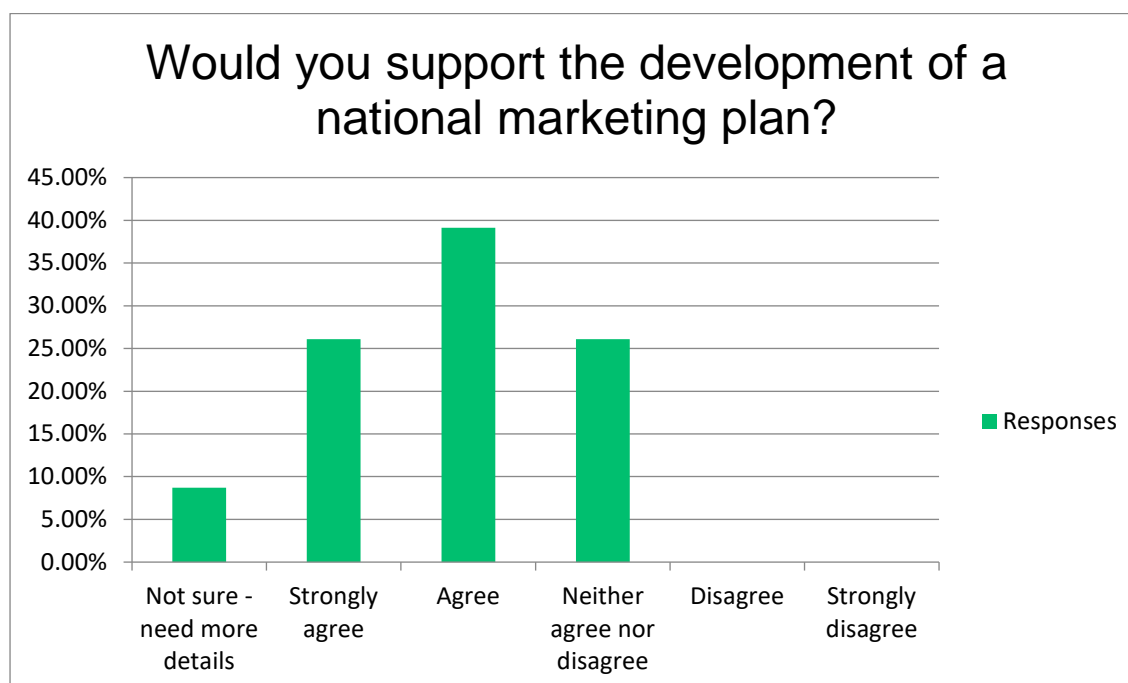
Q23: Do you feel that a coordinated voice working on behalf of all in the industry would be useful?



Q24: What 2-way communications methods are best for future development and ongoing engagement?



Q25: Would you support the development of a national marketing plan?



Q26: Is there anything that you wish to add (please write your thoughts below)



Compliance	Community	Unique Industry
Differences In Legislation Between Jurisdictions Are A Compliance Issue	I Would Like To See A Number Of National Approaches. Eg R&D, Marketing, Communication	The Mud crab Fishery Is A Stand Alone One. As So Many Fishers In So Many Different Areas No Corporate Or Corporates Can Actually Take Control Of The Industry. It Is And Always Will a\Be A Personal One On One Relationship With Catcher And Seller
Tagging Of Crabs (As Per Lobster In Many Jurisdictions) Has The Capacity To Address Issues Such As "Black Marketing/ Quota Avoidance" And May Provide Opportunities To Support More Advances Assessments (I.E., Using Average Weight Of Individual As A Proxy For Length)	Diversity Of Operations (Intensity, Seasonality, Profitability) Is Both A Strength And Weakness Of The Industry. How Can The Workshop Develop Outputs That Accommodate All Of Those Who Stay In The Industry Without Bias Towards Some Sectors (E.G., Catch Access Owners, Processors, Big Operators, Multi-Species Fishers)	Underdeveloped Nature Of WA Mud Crab Fishery - Only 3 Commercial Operators None Of Who Have Fished Consistently (2 Are Businessmen Leasing Their Pots To Others) Hasn't Helped The Development Of This Fishery. Previous Allocation Of Traps To Indigenous Groups Failed With Lack Of Fishing. So Small Industry Catch Resulted In Minimal Investment And Low Priority Of Mud Crab By Government. Things Slowly Changing With Recent Transfer To Managed Fishery Status And Interest In Indigenous Trap Allocation
	I Like The Idea Of Building A 'Community' For The Fishery In Which There Is Communication Across Sectors And Effort To Understand The Roles All Play. There Would Be Great Potential In Working Together For Mutual Benefit	For Christ Sake Give Us Credit For Being In An Industry For A Very Long Time, Crabbing Sustainably And Having A Consistently Economically Viable Business
	Interstate Cooperation On Research And Management Is Vital To Reduce Duplication And More Effectively Understand The Biology And Habitats Of The Mud Crab/S	