

Evaluation of current options: what's a good model – what isn't?

research FOR A SUSTAINABLE FUTURE

Mark Morrison*, Jeanette Durante~, Jenni Greig* and John Ward#

*Charles Sturt University

~ QLD Department of Natural Resources and Water

CSIRO Land and Water

Three research questions:

1. What are the characteristics of MBIs and incentives that will lead to increased participation?
2. Who are the individuals/farmers that are most likely to participate in MBIs and incentives?
3. How can MBIs and incentives be communicated and delivered to encourage greater participation?

Why do we care about participation?

- The efficiency gains from using market-based instruments are related to participation
- Important for achieving natural resource management goals
- Equity

Methodology

- 25 expert interviews
- 8 focus groups in four catchments
- Pilot survey of 560 farmers in the South Australian Murray Darling Basin
- Mail survey of 6000 farmers across five catchments in NSW, SA and QLD (response rate 47.3%)

1. What are the characteristics of MBIs and incentives that will lead to increased participation?

- **Who Should Deliver the Program?**

(1-strongly oppose, 5-strongly support)

	Catchment				
	Central West	Northern Rivers	Condamine Alliance	Mackay Whitsunday	Mt Lofty
	Mean	Mean	Mean	Mean	Mean
Support for a non-government organisation	2.90	3.07	2.92	2.75	3.42
Support for Landcare/other community group	3.73	3.65	3.90	3.44	3.79
Support for local CMA/regional body	3.76	3.56	3.73	3.45	3.66
Support for State Government	3.06	3.08	3.04	3.09	3.17
Support for Federal Gvoernment	3.24	3.18	3.10	3.13	3.14
Support for relevant industry group	3.50	3.52	3.58	3.91	3.32

1. What are the characteristics of MBIs and incentives that will lead to increased participation?




What technical support should be offered?

(1-not at all important, 5-very important)

	Catchment				
	Central West	Northern Rivers	Condamine Alliance	Mackay Whitsunday	Mt Lofty
	Mean	Mean	Mean	Mean	Mean
Help identifying potential management actions	3.73	3.55	3.53	3.64	3.46
Help writing application	3.48	3.34	3.47	3.59	3.03
Ongoing technical assistance	3.68	3.57	3.54	3.69	3.35

1. What are the characteristics of MBIs and incentives that will lead to increased participation?

Interest in receiving funds for different activities (1-not at all interested, 5-very interested)

	Central West	Northern Rivers	Condamine Alliance	Mackay Whitsunday	Mt Lofty	χ^2 value
 Interest in receiving funding for managing areas for environmental purposes	3.26	3.18	3.21	3.05	3.27	49.21***
 Interest in receiving funding for on-ground works	3.55	3.22	3.53	3.34	3.17	48.11***
Interest in receiving funding for equipment hire	3.20	2.89	3.19	3.04	2.78	51.77***
Interest in receiving funding for training	3.11	2.90	2.93	2.90	2.74	26.28**
 Interest in receiving funding for provision of technical advice	3.35	3.16	3.19	3.21	3.02	31.15***
Interest in receiving funding for attendance at workshops	3.05	2.85	2.94	2.92	2.66	42.88***

1. What are the characteristics of MBIs and incentives that will lead to increased participation?

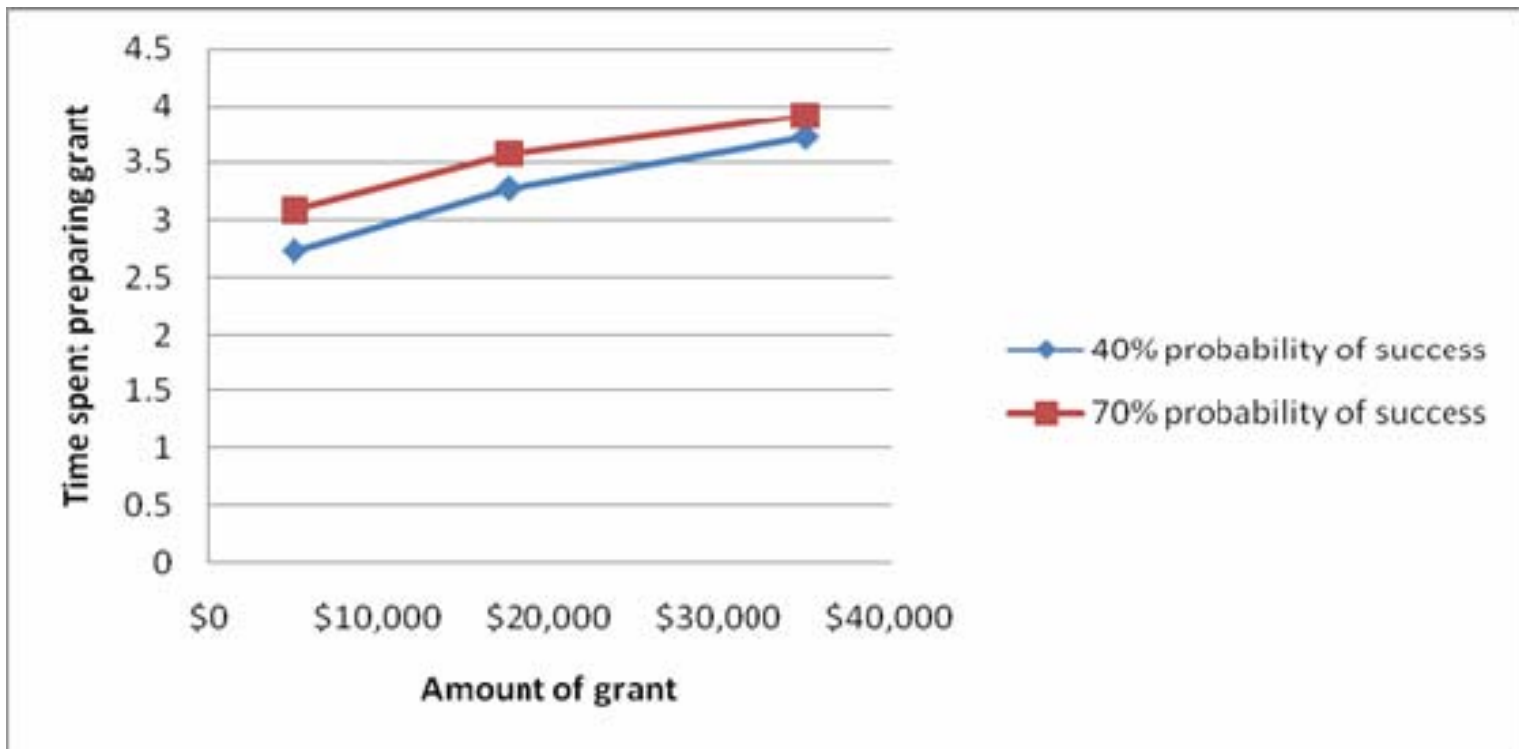
Preferences for Contract Length

	Central West	Northern Rivers	Condamine Alliance	Mackay Whitsunday	Mt Lofty
3 year contract plus optional 7 years	64.81%	67.43%	64.72%	70.62%	65.38%
5 year contract plus optional 5 years	31.75%	26.21%	31.03%	25.82%	30.20%
Fixed 10 year contract	3.44%	6.36%	4.24%	3.56%	4.42%

1. What are the characteristics of MBIs and incentives that will lead to increased participation?

Willingness to spend time preparing a grant application

(1-up to 2 hours, 2-up to half a day, 3-up to one day, 4-up to two days, 5-more than two days)



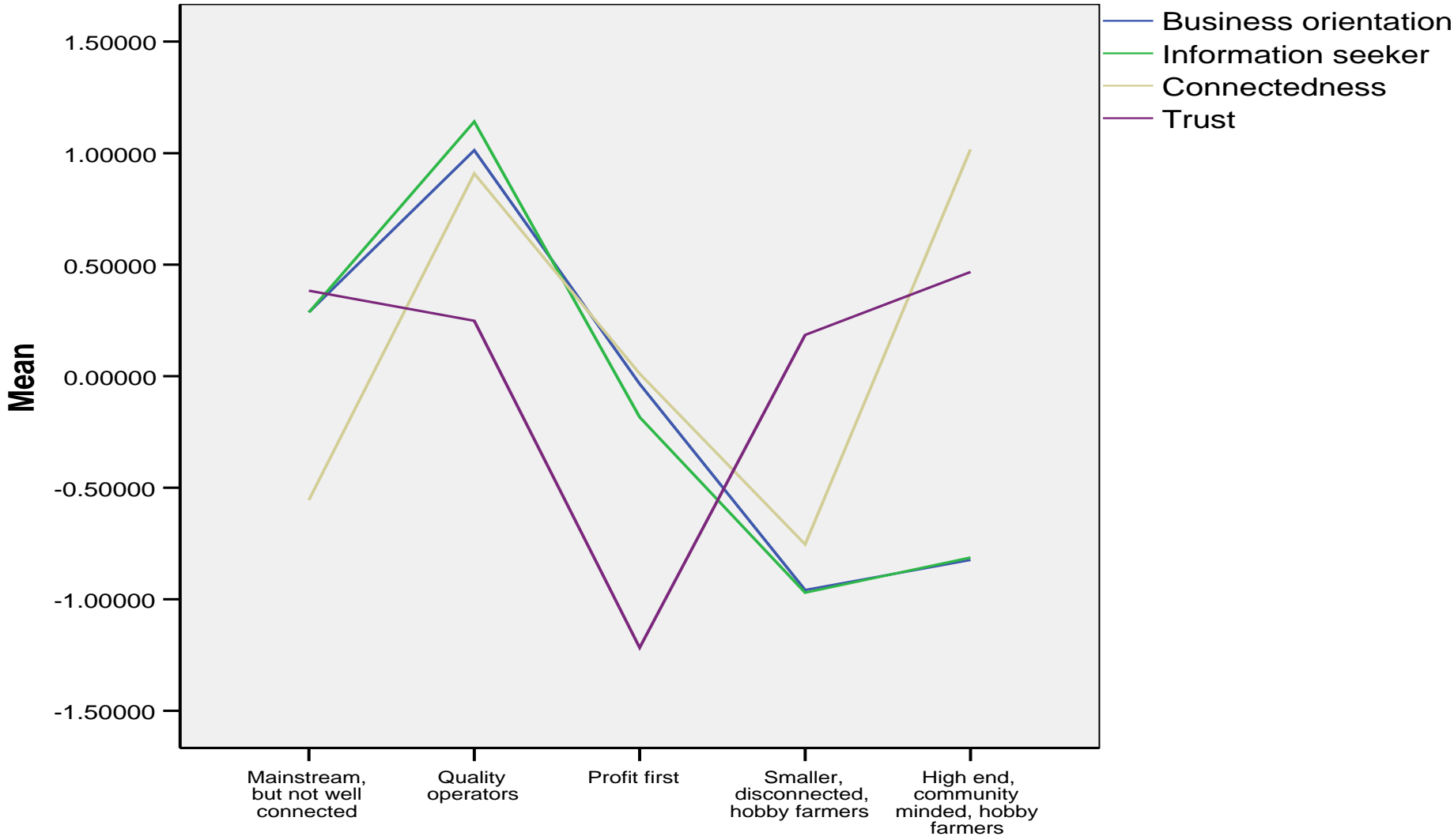
1. What are the characteristics of MBIs and incentives that will lead to increased participation?

(1-not at all interested, 2-some interest, 3-interested, 4-strong interest, 5-definitely interested)

	Catchment				
	Central West	Northern Rivers	Condamine Alliance	Mackay Whitsunday	Mt Lofty
	Mean	Mean	Mean	Mean	Mean
Interest in a Fixed Grant	3.23	2.83	3.10	2.91	2.82
Interest in a Cost Share	3.00	2.59	2.83	2.65	2.60
Interest in a Tender	2.37	2.17	2.26	2.09	2.04

2. Who are the individuals/farmers that are most likely to participate in MBIs and incentives?

- Business orientation, information seeking, connectedness and trust used to define segments
- Five segments found:
 - Segment 1: Mainstream farmers, but not well connected (23.4%)
 - Segment 2: Quality operators (24.2%)
 - Segment 3: Smaller, disconnected, hobby farmers (24.2%)
 - Segment 4: Profit first (19.4%)
 - Segment 5: High end, community-minded, hobby farmers (8.9%)



Sociodemographics and farm characteristics

	Landholder Segments				
	Mainstream, but not well connected	Quality operators	Profit first	Smaller, disconnected, hobby farmers	High end, community minded, hobby farmers
	Mean	Mean	Mean	Mean	Mean
Farmer	.37	.65	.45	.10	.14
retired_pensioner_ student	.11	.05	.15	.27	.24
Professional	.17	.07	.08	.22	.28
Property managed as a lifestyle block	.09	.01	.10	.61	.56
Hours per week worked on property	31.87	48.69	38.79	17.62	20.59
Total area of property	431.70	1093.67	576.56	181.34	376.51
Full time workers (besides participant)	.34	.84	.44	.13	.35
Part time workers (besides participant)	.66	1.13	.80	.51	1.24
Highest level of formal education	6.24	6.05	5.21	6.24	6.61
Profit last financial year	.33	.54	.44	.15	.24
Less_10years	.39	.25	.26	.39	.40
Percentage of farm currently covered in native veg	27.60	25.34	31.67	40.44	35.33
Proportion of farm ideally covered in native veg in 30 years	37.41	29.46	33.76	49.90	47.98

Attitudes of segments

	Landholder Segments				
	Mainstream, but not well connected	Quality operators	Profit first	Smaller, disconnected, hobby farmers	High end, community minded, hobby farmers
	Mean	Mean	Mean	Mean	Mean
Profit focused	-0.06	.31	.31	-.35	-.39
Capital constrained	.03	-.08	-.17	.13	.16
Innovative	.08	.32	-.14	-.23	-.15
Environmental responsibility	.08	-.07	-.40	.22	.23
Time constrained	.03	-.18	.15	.03	.03
Satisfaction	.06	.08	-.24	.01	.11

Program Participation

	Landholder Segments				
	Mainstream, but not well connected	Quality operators	Profit first	Smaller, disconnected, hobby farmers	High end, community minded, hobby farmers
	Mean	Mean	Mean	Mean	Mean
Landcare	.12	.19	.05	.04	.08
Envirofund	.02	.09	.01	.00	.03
Central West CMA Incentives	.20	.43	.06	.03	.04
Watersmart Australia Program	.01	.02	.00	.00	.00
Community Water Grants	.01	.06	.01	.00	.00
Water Use Efficiency Program	.01	.07	.00	.00	.00
Bush Recovery Program	.05	.07	.01	.01	.02
Community Water Grants	.03	.03	.01	.02	.00
Condamine Alliance Regional Investment Strategy programs	.08	.15	.02	.00	.04
Rural Water Use Efficiency Program	.07	.28	.08	.02	.07
Land for Wildlife	.02	.04	.00	.04	.07
Sustainable Landscape Program	.17	.23	.01	.05	.00

Interest in Fixed Grants (FG), Cost Share (CS) and Tenders (T)

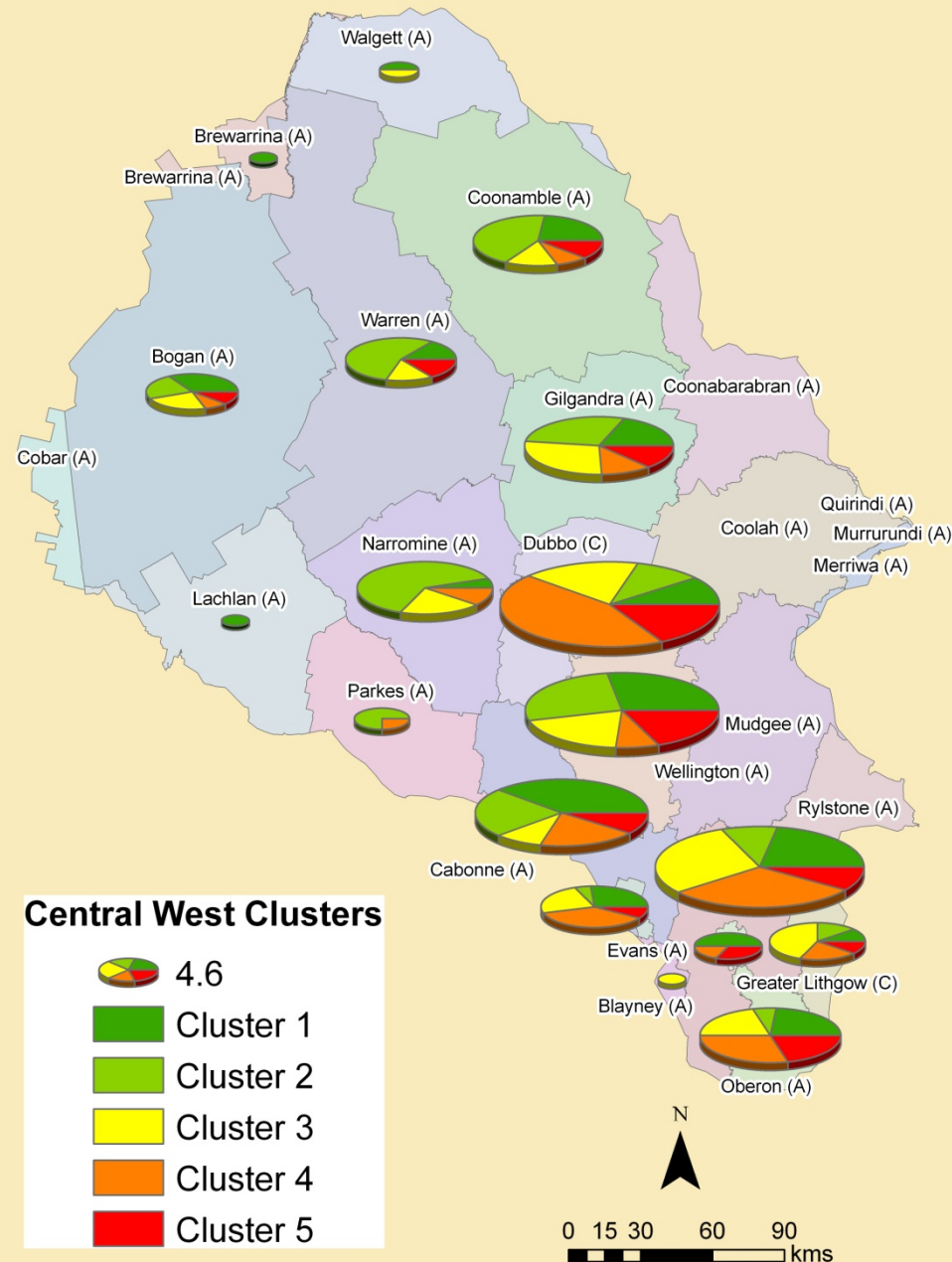
% Strongly or definitely interested

	Landholder Segments				
	Mainstream, but not well connected	Quality operators	Profit first	Smaller, disconnected, hobby farmers	High end, community minded, hobby farmers
	Mean	Mean	Mean	Mean	Mean
Strong or def. interest FG	.37	.46	.19	.24	.30
Strong or def. interest CS	.31	.40	.14	.18	.24
Strong or def interest T	.16	.20	.08	.10	.16

GIS Mapping

- Allows us to understand the distribution of segments across sub-catchments
- What instruments, features and communication strategy likely to be most effective

Proportion of Respondents by Cluster and Local Government Area



A few final observations

Lots of potential for increasing participation by modifying the design of incentives

- Features of MBIs and incentives can be modified to encourage participation without compromising the integrity of a program

Certain segments less likely to use certain incentives

- Tenders unlikely to be adopted by profit first and smaller hobby farmers

Case for offering a range of incentives

eg Tenders for higher cost projects, fixed grants or variable cost share for lower cost projects

A few final observations

May need to specifically design instruments to reach segments with low participation

eg choice of incentive, farm size restrictions, programs for specific areas, delivery through industry group, group incentives, first-timers program

View participation as a developmental process for the segments with low participation

- What can be done to build trust, connectedness and business orientation?
- Extension, short courses, demonstration workshops, simpler instruments with low administrative burden, involve respected opinion leaders

Understand how to communicate better with segments with low participation

Final report available

See Land and Water Australia website
(www.lwa.gov.au)

- Under the Social and Institutional Research Program (SIRP)