

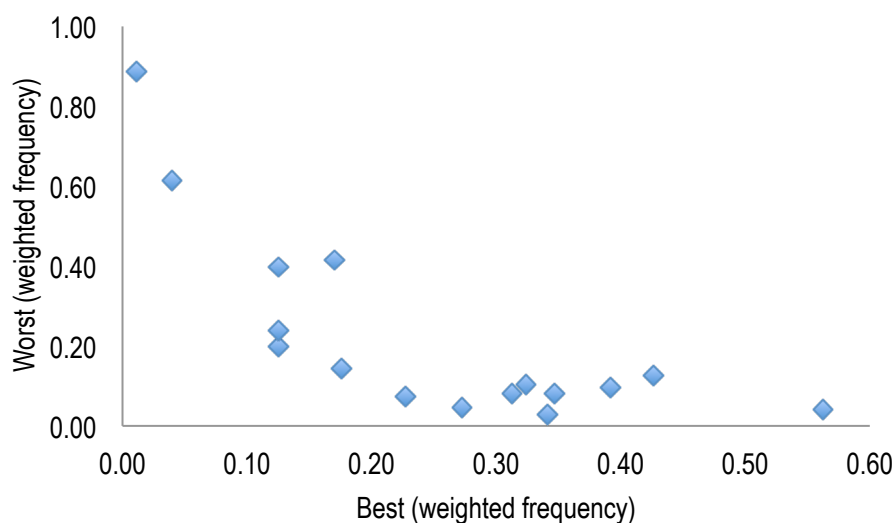


Figure S2 Frequency counts of Best vs Worst (n=88) for each attribute. Data are weighted for occurrence, with 1.00 indicating that an attribute was selected consistently as either Best or Worst each time it appeared in the choice experiment. Two Best selections were randomly included for the attribute “conflict” to facilitate model estimation, as this attribute was never selected as the Best attribute in the choice experiment. The inverse correlation indicates that Best-Worst Scaling analysis is achievable (Louviere et al., 2015).

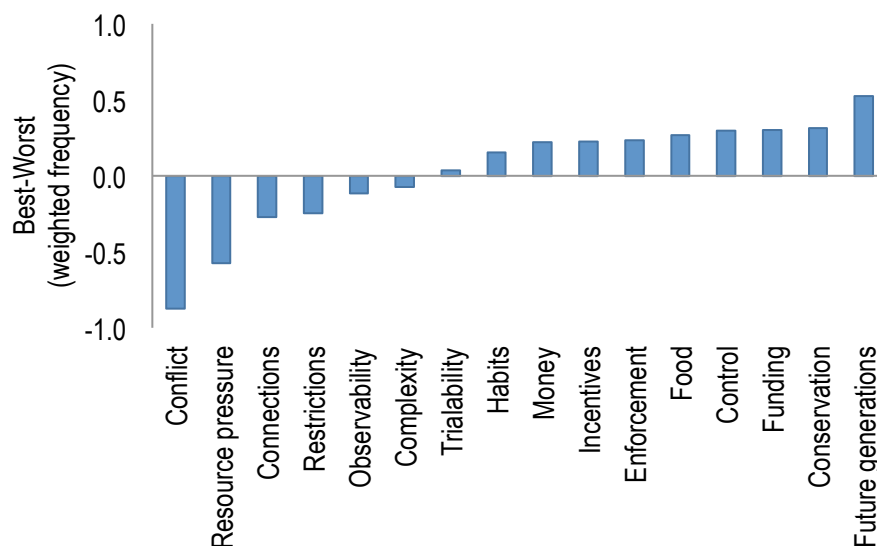


Figure S3 Overall preference scale of LMMA attributes included in the choice experiment, derived by summing the Worst selections for an attribute and subtracting this from the sum of the Best votes for that attribute (B-W). Data are weighted for occurrence in the survey, with 1.00 indicating an attribute was selected consistently as Best or Worst each time it appeared in the choice experiment. Surveys with a completion rate of >60% are included (n=88). Two Best selections were randomly included for the attribute “conflict” to facilitate model estimation, as this attribute was never selected as the Best attribute in the choice experiment.

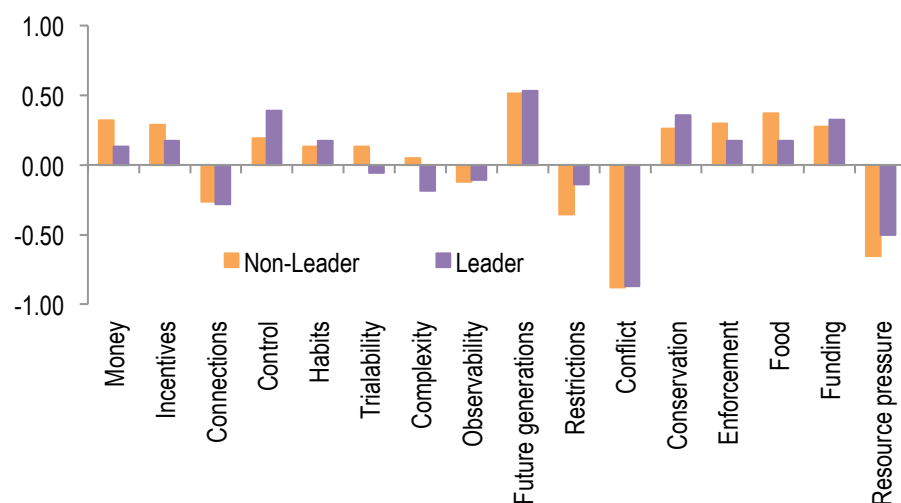


Figure S4 Attitudes to each attribute expressed by leaders and non-leaders. Best-Worst weighted frequency counts for leaders (n= 46) and non-leaders (n=42).

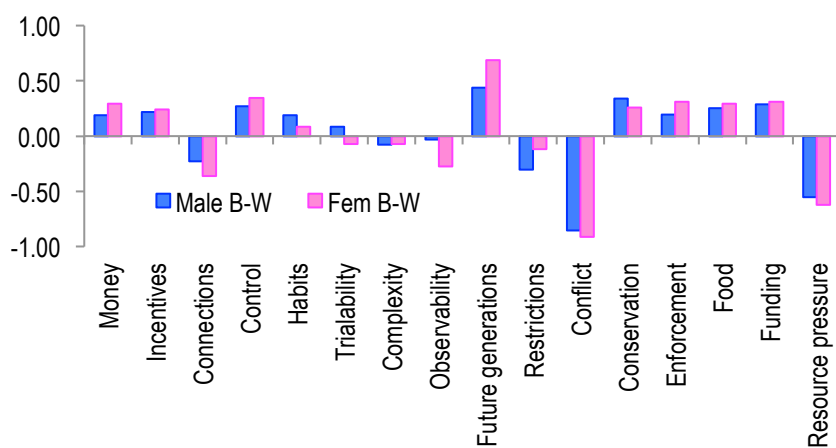


Figure S5 Best and Worst weighted frequency counts: females (n=28) and males (n=60).

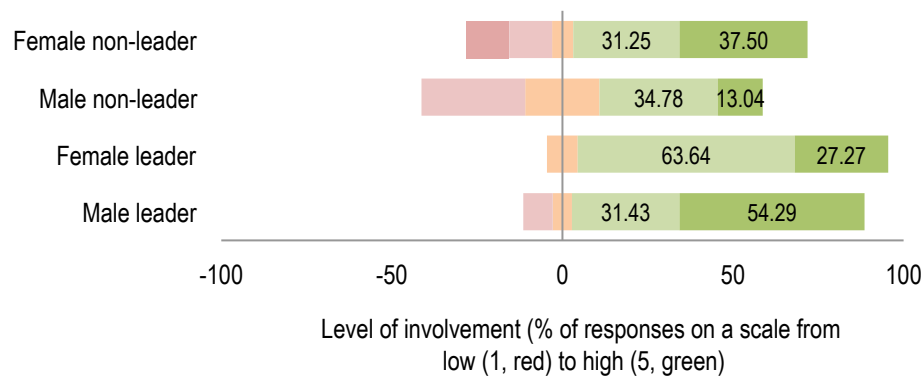


Figure S6 Involvement in the adoption decision by different groups in the sample (n=85) on a scale from “I was not aware of the decision (1, dark red) to “I was very involved in the decision” (5, dark green). Most respondents (71.76%) felt involved in the decision to a level of 4 or 5 out of 5 (green). However, leaders felt more involved (85.71% and 90.91%) than non-leaders (47.83% and 68.75%).

Table S1 The lists of the 33 attributes used in focus groups to identify the most important attributes to include in the choice experiment and the most appropriate wording. Although participants were invited to add attributes, no new attributes were added, but two were re-worded. The abbreviation codes used in the figures and tables are provided in brackets.

ID	Original wording for Focus Group	ID	Final Wording (abbreviation used in analysis provided in brackets)
1	The monetary costs of establishing an LMMA		
2	The type or number of jobs available		
3	The status of the village		
4	The amount of money we could earn	1	The amount of money we could earn (money)
5	The amount of time it would take us to do our jobs		
6	The <i>food</i> we would be able to catch to eat or sell	14	The food we could catch to eat (food)
7	Connections to people in the village and beyond the village	3	Connections to people beyond the village (connections)
8	The control we would have over marine resources	4	The control we would have over our marine resources (control)
9	The control we would have over decisions affecting us		
10	The level of <i>conflict</i> in the village or between villages using the sea	11	The level of conflict in or beyond the village (conflict)
11	The monitoring and enforcement of the rules	13	The monitoring and enforcement of the rules (monitoring)
12	The complexity of establishing and running an LMMA	7	How complicated or simple it seemed to establish an LMMA (complexity)
13	The number of consultations and discussions needed for the LMMA		
14	The level of reliability of the benefits of the LMMA		
15	Someone in the village had seen an LMMA and its benefits	8	Someone in the village had seen or heard of LMMAs and their impacts (observability)
16	Whether we could see the LMMA and its benefits		
17	Whether we could adapt the LMMA to suit our needs	6	Whether LMMAs can be tested or changed to meet our needs (trialability)
18	Whether we could trial the LMMA and its activities		
19	Whether the impacts of the LMMA could be reversed if we chose		
20	Our safety when changing our activities as a result of the LMMA		
21	Whether there was an expectation or a rule to have an LMMA		
22	The relevance (and distance) of the LMMA to our lives, <i>food</i> supply and livelihoods		
23	The effect it would have on our village traditions and customs		
24	The credibility of the LMMA plan and evidence of its success		
25	The responsibility the village felt for improving the management and health of our seas		
26	Certain activities might be prohibited in the LMMA	10	The restriction of certain activities in an LMMA (restrictions)
27	New habits and activities might be needed for the LMMA	5	New habits that might be needed (habits)
28	Changes we might see in the health of our seas	12	The health of the environment (non-target species) (conservation)
29	The benefit other people or the environment may have from the LMMA	9	The benefit to future generations (future generations)
30	The equality and fairness of decisions, rules and benefits of the LMMA		
31	It aligned with the urgency, scale, and importance of problems we faced	16	The pressure on the resources due to more people fishing (resource pressure)
32	The incentives for villages to establish and run an LMMA	2	The incentives for villages to establish and run an LMMA (incentives)
33	Support and advice provided to establish and run an LMMA	15	The funding and training provided by an NGO (funding)

Table S2 Sensitivity analyses of the effect of completion rate on the results of the Conditional logit models (Best) for both Best and Worst choices in the choice experiment. Values that are significantly different ($p < 0.01$) to the reference attribute are italicised. Two Best selections were randomly included for the attribute “conflict” to facilitate model estimation, as this attribute was never selected as the Best attribute in the choice experiment.

Table S2a Surveys with a completion rate of >60% used, n=88

>60% (n=88)	BEST		95% Confidence interval	
Attribute	Coefficient	p value		
Money	<i>0.908</i>	<i>0.000</i>	<i>0.403</i>	<i>1.413</i>
Incentives	0.559	0.028	0.059	1.059
Connections	-0.448	0.135	-1.036	0.140
Control	1.078	0.000	0.583	1.573
Habits	0.299	0.249	-0.209	0.807
Trialability	0.000			
Complexity	-0.376	0.217	-0.971	0.220
Observability	-0.376	0.205	-0.957	0.205
Future generations	1.878	0.000	1.391	2.366
Restrictions	0.047	0.864	-0.493	0.588
Conflict	-2.861	<i>0.000</i>	<i>-4.309</i>	<i>-1.413</i>
Conservation	<i>0.967</i>	<i>0.000</i>	<i>0.464</i>	<i>1.470</i>
Enforcement	<i>0.711</i>	<i>0.006</i>	<i>0.199</i>	<i>1.222</i>
Food	<i>0.913</i>	<i>0.000</i>	<i>0.428</i>	<i>1.397</i>
Funding	<i>1.305</i>	<i>0.000</i>	<i>0.814</i>	<i>1.796</i>
Resource pressure	-1.557	<i>0.000</i>	-2.403	-0.712

Table S2b Surveys with a completion rate of >80% used, n=59

>=80% (n=59)	BEST		95% Confidence interval	
Attribute	Coefficient	p value		
Money	<i>1.119</i>	<i>0.000</i>	<i>0.506</i>	<i>1.733</i>
Incentives	0.784	0.012	0.172	1.396
Connections	-0.651	0.094	-1.411	0.110
Control	<i>1.144</i>	<i>0.000</i>	<i>0.538</i>	<i>1.750</i>
Habits	0.344	0.285	-0.286	0.974
Trialability	0.000			
Complexity	-0.437	0.260	-1.197	0.323
Observability	-0.593	0.125	-1.350	0.164
Future generations	<i>1.808</i>	<i>0.000</i>	<i>1.209</i>	<i>2.407</i>
Restrictions	0.430	0.180	-0.199	1.059
Conflict	-2.440	<i>0.001</i>	<i>-3.920</i>	<i>-0.959</i>
Conservation	<i>0.959</i>	<i>0.003</i>	<i>0.337</i>	<i>1.581</i>
Enforcement	<i>0.991</i>	<i>0.002</i>	<i>0.370</i>	<i>1.612</i>
Food	<i>0.916</i>	<i>0.002</i>	<i>0.323</i>	<i>1.509</i>
Funding	<i>1.045</i>	<i>0.001</i>	<i>0.427</i>	<i>1.664</i>
Resource pressure	-1.079	0.018	-1.976	-0.182

Table S2c Surveys with a completion rate of 100% used, n=50

100% (n=50)	BEST		95% Confidence	
Attribute	Coefficient	p value	interval	
Money	1.101	0.001	0.433	1.768
Incentives	0.634	0.063	-0.034	1.302
Connections	-0.542	0.188	-1.349	0.265
Control	1.166	0.000	0.510	1.823
Habits	0.375	0.283	-0.309	1.058
Trialability	0.000			
Complexity	-0.748	0.103	-1.646	0.151
Observability	-0.372	0.354	-1.159	0.415
Future generations	1.870	0.000	1.215	2.524
Restrictions	0.424	0.222	-0.257	1.104
Conflict	-2.266	0.003	-3.762	-0.771
Conservation	1.007	0.003	0.332	1.681
Enforcement	1.027	0.003	0.358	1.697
Food	1.079	0.001	0.441	1.716
Funding	1.000	0.004	0.325	1.675
Resource pressure	-1.062	0.032	-2.032	-0.092

Table S3 Summary of the number of surveys per village and those used in the analysis (n=88)

Village name	Village name abbreviation	BWS choice sets in survey	Num. Survey	Num. surveys analysed
Ambolobozokely*	n/a	16	26	0
Ambolobozobe*	n/a	16	28	0
Ambavarano**	Am/rano	8	26	20
Ampondrahazo **	Am/hazo	8	30	23
Ivovona**	Iv/ona	8	30	22
Ambodivahibe**	Am/ahibe	8	27	23
Totals			167	88

*Conservation International provided training about LMMAs. Village situated outside the regional MPA

**Conservation International provided training, a site visit to an LMMA, funding and livestock incentives (e.g. hens). Village situated within the regional MPA

Table S4 Characteristics of survey respondents recorded in the household surveys (percentages provided in brackets) and included in the analysis (n=88).

	Male (%)	Female (%)	Total
Leader (%)	35 (39.8%)	11 (12.5%)	46 (52.3%)
Non-leader (%)	25 (28.4%)	17 (19.3%)	42 (47.73%)
Total	60 (68.2%)	28 (31.8%)	88 (100%)