

Appendix 1

Table A1.1 Indicators used, and their corresponding SESF variables, to measure the content of deliberation transcripts.

SESF 1st tier	General criteria for qualitative coding	SESF 2 nd tier (content variables)	Indicator terms and (concepts) used to represent variables
Resource systems (RS)	Content relating to coastal or marine ecosystems and ecological processes	RS1 – Sector RS2 – Clarity of system boundaries RS3 – Size of resource system RS4 – Human-constructed facilities RS5 – Productivity of system RS6 – Equilibrium properties RS7 – Predictability of system dynamics RS8 – Storage characteristics RS9 – Location	Mangroves, river, ecosystem, reproduction (of general system), habitat, fishing area, coral reef, rock reef, coast, nature, natural system, resource system, bay, tides, health (of system)
Resource units (RU)	Content relating to specific harvestable species	RU1 – Resource unit mobility RU2 – Growth or replacement rate RU3 – Interaction among resource units RU4 – Economic value RU5 – Number of units RU6 – Distinctive characteristics RU7 – Spatial and temporal distribution	Fish, amounts of fish, sea bass, snapper, lobster, oyster, value of fish, reproduction (specific species), seaweed, shrimp, species locations, species behavior
Actors (A)	Content relating to specific people, actor groups and /or social conditions	A1 – Number of relevant actors A2 – Socioeconomic attributes A3 – History or past experiences A4 – Location A5 – Leadership/entrepreneurship A6 – Norms /social capital A7 – Knowledge of SES/mental models A8 – Importance of resource A9 – Technologies available	Fishers, (reference to specific individuals), patrons, markets, income, gear used, (perceptions), (past events), (reference to community), gender, leadership, (beliefs), communication
Governance systems (GS)	Content related to management, governance or organizations involved	GS1 – Government organizations GS2 – Nongovernment organizations GS3 – Network structure GS4 – Property-rights systems GS5 – Operational-choice rules GS6 – Collective-choice rules GS7 – Constitutional-choice rules GS8 – Monitoring and sanctioning rules	Coast Guard, INCOPESCA, CNP, management, governance, (reference to specific rules), regulations, enforcement, fines, institutions, surveillance, associations, organizations
Interactions (I)	Content relating specific interactions in social organization, or people and nature.	I1 – Harvesting I2 – Information sharing I3 – Deliberation processes I4 – Conflicts I5 – Investment activities I6 – Lobbying activities I7 – Self-organizing activities I8 – Networking activities I9 – Monitoring activities I10 – Evaluative activities	Harvesting, (aspects related directly to catching fish), information, (aspects related to sharing information between participants), (aspects related to conflict situations), investment, (aspects related to investments of time or money), (aspects related to self-organization), (aspects related to evaluating the performance of management)
Outcomes (O)	Content relating to perceived outcomes	O1 – Social performance measures O2 – Ecological performance measures O3 – Externalities to other SESs	Benefits, bad, future, impacts, (aspects related to perceptions of social outcomes), (aspects related to perceptions of ecological outcomes)

Figure A1.1 Plot of necessary sample sizes given desired statistical power, over a range of observed effect sizes from the field experiment (Cohen's d), at significance level 0.05.

