

**gef** **Pacific R2R** Ridge to Reef **Pacific Community** Communauté du Pacifique

# State of the Coasts

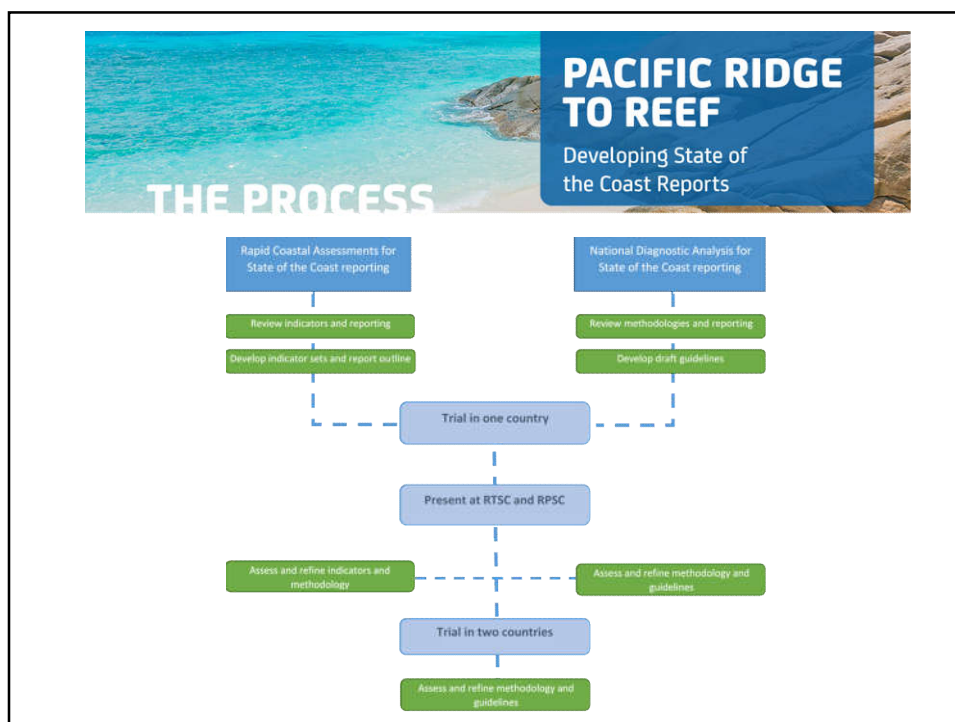
1<sup>st</sup> Regional Science and Technical Committee Meeting  
Nuku'alofa, Tonga  
1<sup>st</sup> August, 2017




## PACIFIC RIDGE TO REEF

Developing State of the Coast Reports

### THE OUTPUT

- NATIONAL RAPID COASTAL ASSESSMENTS**
  - Methodology and procedures for characterizing coastal areas
  - National and online data portals
- NATIONAL ISLAND DIAGNOSTIC ANALYSIS**
  - Guidelines for diagnostic analyses of coastal areas
  - Identification of required (R2R) actions and reforms
- NATIONAL SoC REPORTS**
- NATIONAL SoC DIAGNOSTIC REPORTS**
- STRATEGIC ACTION FRAMEWORK FOR ICM**




## Indicator Sets

### Indicator Criteria

- GEF stress reduction, process or governance target indicator?
- SDG and/or UN Convention target indicator?
- National reporting indicator?
- Indicator is representative of ecosystem state, risk, or management?
- Methodology is commonly used in the Pacific?
- Methodology is affordable, portable and robust? Expertise exists?
- Is data already available?





## Indicator Sets

### Literature review

- GEF Stress Reduction, Process and Governance targets (across 5 R2R focal areas)
- Sustainable Development Goals – UN
- Worldbank Indicators
- Aichi Targets – UN
- BIORAP Guidelines – SPREP
- Guidelines for Vulnerability Mapping – IOC
- Integrated Coastal Management Indicators -
- State of the Coasts Report – Kenya, Australia, Nova Scotia,
- State of the Forests – Australia
- OzCoasts
- PEMSEA State of the Coasts Guidelines – GEF, UNDP
- Environment Vulnerability Index



## Indicators within the DPSIR framework

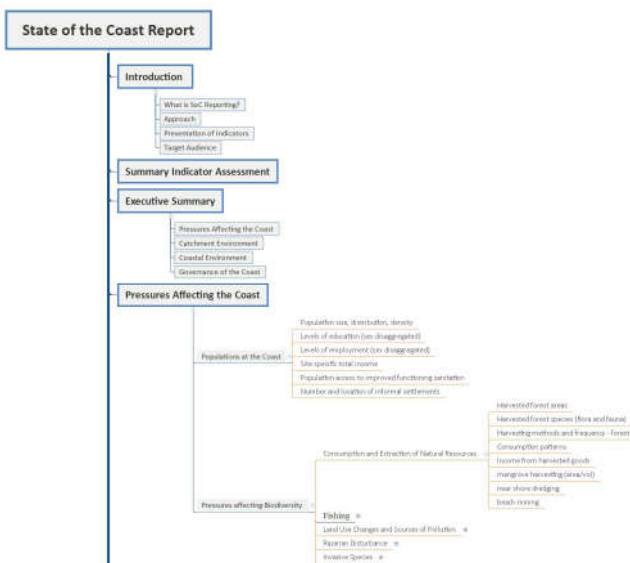
Code	Indicator	Measurement	Type/Focus					Collection Techniques	Existing Data
			D	P	S	I	R		
G1	Legislation	<ul style="list-style-type: none"> <li>o Existence of legislation for R2R</li> <li>o Adequacy (matrix) of legislation (including gender assessment)</li> <li>o Ratification of MEA's and regional policies and frameworks</li> <li>o Protected areas</li> </ul>						<ul style="list-style-type: none"> <li>- Document review</li> <li>- Interviews with NRM managers and other experts</li> <li>- Surveys</li> </ul>	-
G2	Traditional Governance	<ul style="list-style-type: none"> <li>o land tenure type</li> <li>o presence of traditional governance mechanisms</li> </ul>						<ul style="list-style-type: none"> <li>- Document and record review</li> </ul>	-
G3	Coordinating Mechanism	<ul style="list-style-type: none"> <li>o Existence of coordinating mechanisms for various sectors (or cross-sectoral) and legal basis</li> <li>o Participation</li> <li>o Stakeholder representation</li> </ul>						<ul style="list-style-type: none"> <li>- Document review (meeting records etc)</li> <li>- Interviews with NRM managers and members</li> </ul>	-
G4	Management plans	<ul style="list-style-type: none"> <li>o Existence, characteristics, and status of NRM plans</li> <li>o Extent (percentage) area covered by NRM plans</li> </ul>						<ul style="list-style-type: none"> <li>- Document review</li> <li>- Interviews</li> </ul>	-
G5	Active management	<ul style="list-style-type: none"> <li>o Level of implementation of plans</li> <li>o Procedures, legal tools, and monitoring and sanctioning applied for enforcement of NRM plans/actions</li> <li>o Level of enforcement of, or compliance with, NRM plans</li> </ul>						<ul style="list-style-type: none"> <li>- Document review</li> <li>- Interviews</li> <li>- Surveys</li> </ul>	-
G6	Monitoring and evaluation	<ul style="list-style-type: none"> <li>o Monitoring programs at sites</li> <li>o Existence of an operational monitoring and evaluation system with related indicators within NRM Plans</li> <li>o Consideration of results and adjustments in NRM initiatives</li> </ul>						<ul style="list-style-type: none"> <li>- Document and record review</li> </ul>	-
G7	Stakeholder Participation	<ul style="list-style-type: none"> <li>o Community practice in landcare, coastal care and marine care groups (e.g. LMMA)</li> </ul>						<ul style="list-style-type: none"> <li>- Interviews</li> <li>- Surveys</li> <li>- Document review</li> </ul>	-

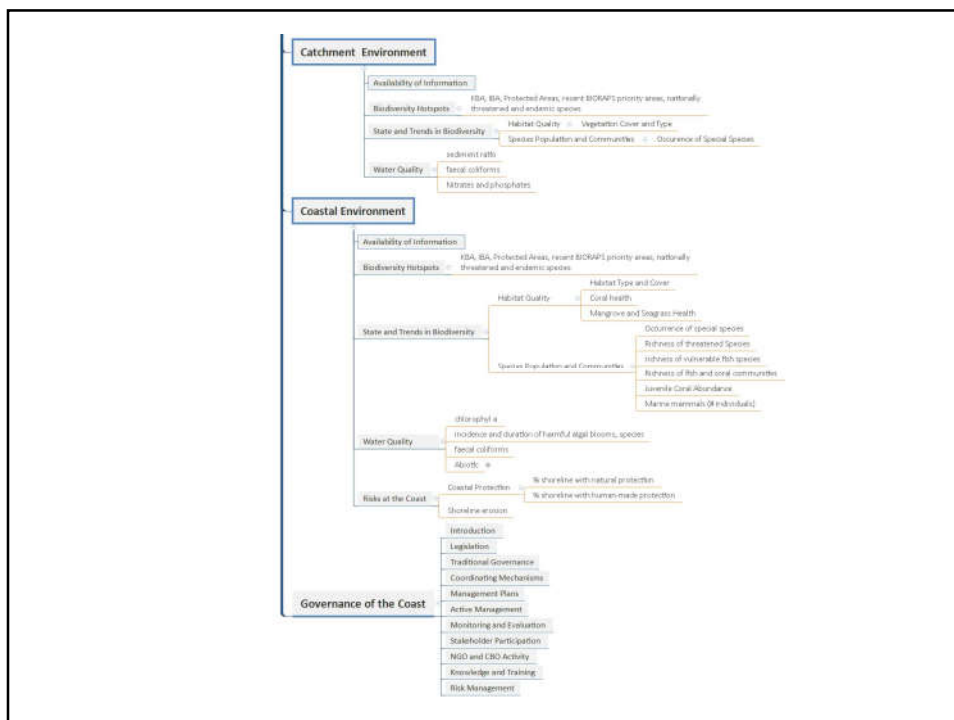
G8	NGO and CBO activity	<ul style="list-style-type: none"> <li>o Existence and characteristics of NGOs and community organizations active in land, coastal, marine and biodiversity conservation</li> <li>o Level of activity of NGOs and community organizations</li> </ul>					<ul style="list-style-type: none"> <li>- Document reviews</li> <li>- Interviews</li> </ul>	-
G9	Knowledge and Training	<ul style="list-style-type: none"> <li>o Education and training programmes that incorporating ICM/WRM/NRM</li> <li>o Number of community receiving relevant information</li> <li>o Number and % of community practices informed by information and evidence</li> </ul>					<ul style="list-style-type: none"> <li>- Document and record review</li> <li>- Surveys</li> <li>- Interviews</li> </ul>	-
G10	Risk Management	<ul style="list-style-type: none"> <li>o Availability of hazard maps</li> <li>o Availability and coverage of emergency response plans</li> <li>o Institutional mechanism for emergency response</li> <li>o Availability and coverage of risk based urban planning</li> </ul>					<ul style="list-style-type: none"> <li>- Document and record review</li> <li>- Interviews</li> </ul>	-
SE1	Demographics	<ul style="list-style-type: none"> <li>o Population size, distribution</li> <li>o Levels of education (sex disaggregated)</li> <li>o Levels of employment (sex disaggregated)</li> <li>o Site specific total income</li> </ul>					<ul style="list-style-type: none"> <li>- Database</li> <li>- Document review</li> </ul>	-
SE2	Human pressures on habitats	<ul style="list-style-type: none"> <li>o Population density</li> <li>o Land use/land cover patterns</li> <li>o High impact fishing gear practices</li> <li>o Number and location of ports</li> <li>o Extractive resource use (sand mining, dredging, mangrove harvesting)</li> <li>o Number and location of waterways extraction (dredging, mining)</li> <li>o Tourism (?)</li> </ul>					<ul style="list-style-type: none"> <li>- Monitoring programs</li> <li>- Databases</li> <li>- Interviews</li> <li>- Surveys</li> </ul>	- DEM and land use - Ministry of Ag. and Forestry

SE3	Pollutants and introduction	<ul style="list-style-type: none"> <li>o Population % access to improved functioning sanitation</li> <li>o Number, location and estimate volume of point source discharges (coastal and surface water)</li> <li>o Non-point source nutrient loading (fertiliser imports)</li> <li>o Number and location of informal settlements</li> </ul>					<ul style="list-style-type: none"> <li>- Monitoring programs</li> <li>- Databases</li> <li>- Document review</li> <li>- Surveys</li> <li>- Interviews</li> </ul>	-
SE4	Exploitation of living resources	<ul style="list-style-type: none"> <li>o Consumption patterns (marine and terrestrial resources)</li> <li>o Economic value</li> <li>o Targeted species (fauna and flora)</li> <li>o Harvest and fishing areas</li> <li>o Frequency of harvest/fishing</li> <li>o Methods of harvest/fishing</li> </ul>					<ul style="list-style-type: none"> <li>- Document review</li> <li>- Database</li> <li>- Interviews</li> <li>- Surveys</li> </ul>	-
SE5	Coastal protection	<ul style="list-style-type: none"> <li>o % of shoreline with natural protection</li> <li>o % of shoreline with human-made protection (proportion adhoc or engineered)</li> </ul>					<ul style="list-style-type: none"> <li>- Surveys</li> <li>- Document review</li> </ul>	-
E1	Diversity	<ul style="list-style-type: none"> <li>o Occurrence of special species (marine and terrestrial)</li> <li>o Occurrence of invasive species (marine and terrestrial)</li> <li>o Richness of fish communities</li> <li>o Richness of coral communities</li> </ul>					<ul style="list-style-type: none"> <li>- Species inventory</li> <li>- Sampling</li> <li>- Monitoring programs</li> </ul>	<ul style="list-style-type: none"> <li>- Birdlife International for Atolls</li> <li>- Pacific Invasive Learning Network</li> <li>- PROCFISH - SPC</li> </ul>
E2	Abundance	<ul style="list-style-type: none"> <li>o Juvenile coral</li> <li>o Marine flora</li> <li>o Biomass (key fisheries)</li> <li>o Number of individuals (marine mammals)</li> </ul>					<ul style="list-style-type: none"> <li>- Monitoring programs and surveys</li> </ul>	<ul style="list-style-type: none"> <li>- Turtle Database - SPREP</li> <li>- PROCFISH</li> </ul>
E3	Habitat quality	<ul style="list-style-type: none"> <li>o Coral health</li> <li>o Habitat type (coast and catchment)</li> <li>o Habitat cover (coast and catchment)</li> <li>o Mangrove and seagrass health</li> </ul>					<ul style="list-style-type: none"> <li>- Monitoring programs and surveys</li> <li>- Remote sensing</li> <li>- Databases</li> </ul>	<ul style="list-style-type: none"> <li>- Vegetation of Tropical Island Pacific (book)</li> <li>- Art Whistler (book)</li> <li>- Seagrass Watch</li> <li>- FAME developing a methodology for seagrass</li> </ul>

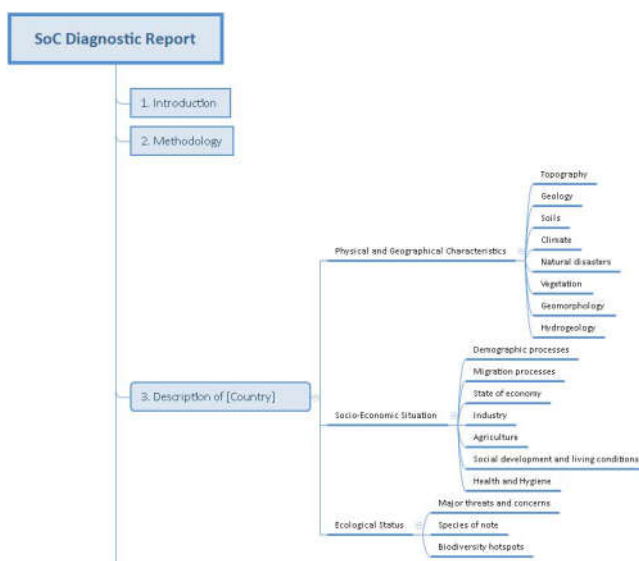
E4	Species health	<ul style="list-style-type: none"> <li>Richness of threatened and vulnerable fisheries species</li> </ul>					<ul style="list-style-type: none"> <li>Monitoring programs and surveys</li> </ul>	<ul style="list-style-type: none"> <li>PROCFISH</li> </ul>
E5	Biodiversity hotspots (coast and catchment)	<ul style="list-style-type: none"> <li>Key biodiversity areas</li> <li>Important bird areas</li> <li>Protected areas</li> <li>Recently identified priority areas (BIORAPs)</li> <li>Nationally threatened and endemic species</li> </ul>					<ul style="list-style-type: none"> <li>Document review</li> <li>Interviews</li> <li>Databases</li> <li>Surveys</li> </ul>	<ul style="list-style-type: none"> <li>National and Regional KBA</li> <li>Birdlife International</li> <li>BIOPAMA – SPREP</li> <li>BIORAP – SPREP</li> <li>Review of surveys, list of species (not in IUCN), NBSAP</li> </ul>
E6	Water quality (coast and catchment)	<ul style="list-style-type: none"> <li>Physico-chemical parameters</li> <li>Nutrient concentration (phosphate and nitrates/nitrites)</li> <li>Faecal coliform</li> <li>Chlorophyll a concentration</li> <li>Incidence and duration of harmful algal bloom (coast)</li> <li>Defined and enforced riparian zones (catchment)</li> </ul>					<ul style="list-style-type: none"> <li>Monitoring programs</li> <li>Sampling</li> </ul>	<ul style="list-style-type: none"> <li>IAS</li> <li>FAME</li> </ul>
E7	Shoreline stabilisation	<ul style="list-style-type: none"> <li>Shoreline erosion</li> <li>Shoreline accretion</li> </ul>					<ul style="list-style-type: none"> <li>Monitoring programs</li> </ul>	<ul style="list-style-type: none"> <li>GSD</li> </ul>

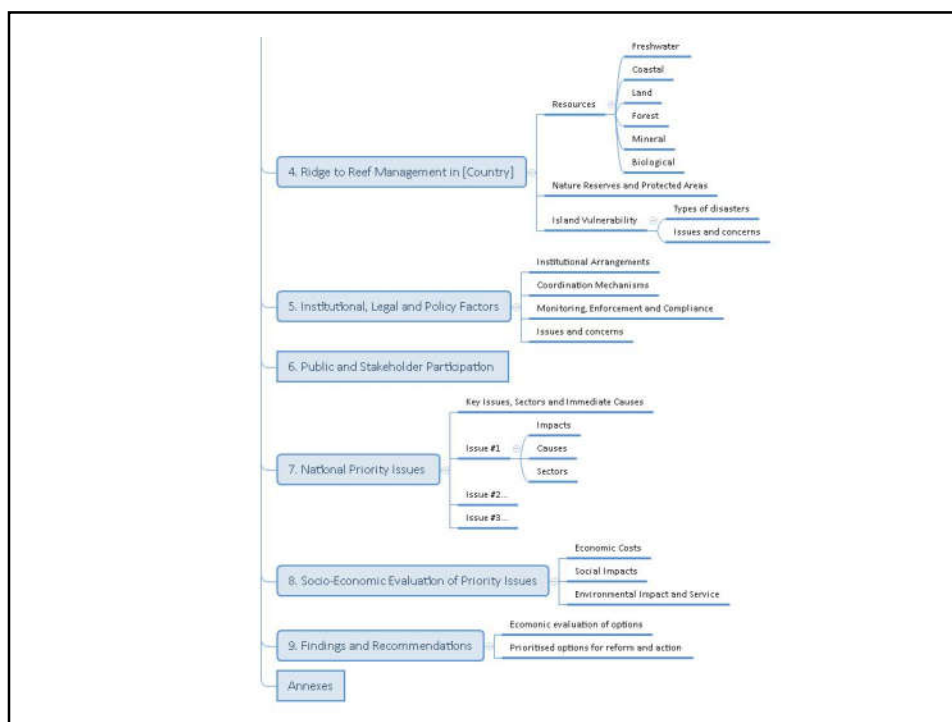
## Draft Structure of the State of the Coast report





## Draft Structure of the SoC Diagnostic Report





## Technical requirements

- National consultants for conducting terrestrial and marine assessment, socio-economic survey, governance and legislation review
- Data entry and analysis
- Database development and online GIS portal to store data and information, and for interactive retrieval and planning for stakeholders and interested parties
  - 1 x 14 national databases, 1 regional database
  - Regional portal
  - Interoperability and linked with existing R2R and SPC websites

