



SPC/GEF-R2R/RPSC.2/11

Date: 24<sup>th</sup> July 2017

Original: English

2<sup>nd</sup> Regional Programme Steering Committee Meeting for the GEF/SPC/UNDP Project Entitled: “Ridge to Reef – Testing the Integration of Water, Land, Forest & Coastal Management to Preserve Ecosystem Services, Store Carbon, Improve Climate Resilience and Sustain Livelihoods in Pacific Island Countries”

Nuku’alofa, Tonga, 31<sup>st</sup> July – 4<sup>th</sup> August, 2017

***STATE OF THE COASTS DRAFT TABLE OF CONTENTS***

## 1. National State of the Coast Reports

### 1.1. Background

As part of the Regional Pacific Ridge to Reef Project, an evidence-based planning approach that incorporates scientifically and objectively sound procedures for identifying and characterizing coastal areas will be developed. This will inform the development of national State of the Coast reports, and be the methodological basis for the ongoing monitoring of these. The State of the Coast report will be used nationally as planning tools and will also be used to inform the development of national inter-ministerially agreed Strategic Action Frameworks for Integrated Coastal Management.

The characterisation procedure will identify data and information needs relating to the biological, environmental and socio-economic status of national coastal sites from the perspective of vulnerabilities associated with disaster risk, climate variability, and extremes in weather. Initially an analysis of existing national and regional data will be undertaken and *in situ* data collection activities conducted where significant gaps in knowledge occur. The process will be fully transparent and comprehensible to all parties, be both technically and politically acceptable, and based as far as possible on objective quantifiable criteria and indicators.

A parallel activity will design and demonstrate a diagnostic approach to guide the identification of required R2R reforms and actions. The developed diagnostic approach will be applied at priority locations to produce diagnostic reports for approval by national Inter-Ministry Committees.

This information in addition to that generated via the 14 national IW and STAR Projects from their respective baseline and monitoring activities will be compiled and managed in one regional database and 14 national GIS and meta-databases of coastal area information for longer-term R2R planning. These datasets will be used to inform the national State of the Coasts reports that will be fully developed through national consultations and delivered during National Coastal Summits

### 1.2. An Anticipated Project Outcome

A significant focus of the Regional IW R2R Project is on the development of national and regional Strategic Action Frameworks for ICM/IWRM and the supporting documents, national State of the Coast Reports and Diagnostic Reports. The overarching strategic results framework relates to the achievement of the following **outcome**:

***Outcome 3.1: National and regional strategic action frameworks for ICM/IWRM endorsed nationally and regionally***

The related indicator and logframe target are as follows:

**Indicator 3.1.3:** Number of demonstrable use of national 'State of the Coasts' or 'State of the Islands' reports in national and regional action planning for R2R investment

**Target 3.1.3:** National 'State of the Coasts' or 'State of the Islands' reports for 14 PICs completed and launched to Pacific Leaders during National Coastal Summits (Yr. 3) in coordination with national R2R projects and demonstrated as national development planning tool, including guidelines for diagnostic analyses of coastal areas

Additional to these directly related elements are the following outcomes that contribute to the development of the State of Coast reports through methodology development, data collection and analysis:

***Outcome 1.1: Successful pilot projects testing innovative solutions involving linking ICM, IWRM and climate change adaptation [linked to national STAR projects via larger Pacific R2R network]***

**Outcome 1.2: National diagnostic analyses for ICM conducted for prioritizing and scaling-up key ICM/IWRM reforms and investments**

1.3. The Process for Development of State of the Coast Reports

The process of developing the national State of the Coast Reports will be facilitated via a coordinated programme of activities focussing on national and regional consultation combined with targeted technical and coordination support. The whole procedure will be drawing data and information from several key areas of the Regional IW R2R Program and National STAR R2R Projects, and will be conducted alongside the development of national Diagnostic Reports. The procedure will be trialled at several countries in late 2017 and each iteration will bring adjustments and improvements before being scheduled to remaining countries. Below is a diagram of the development process and a brief schematic of steps taken to date.

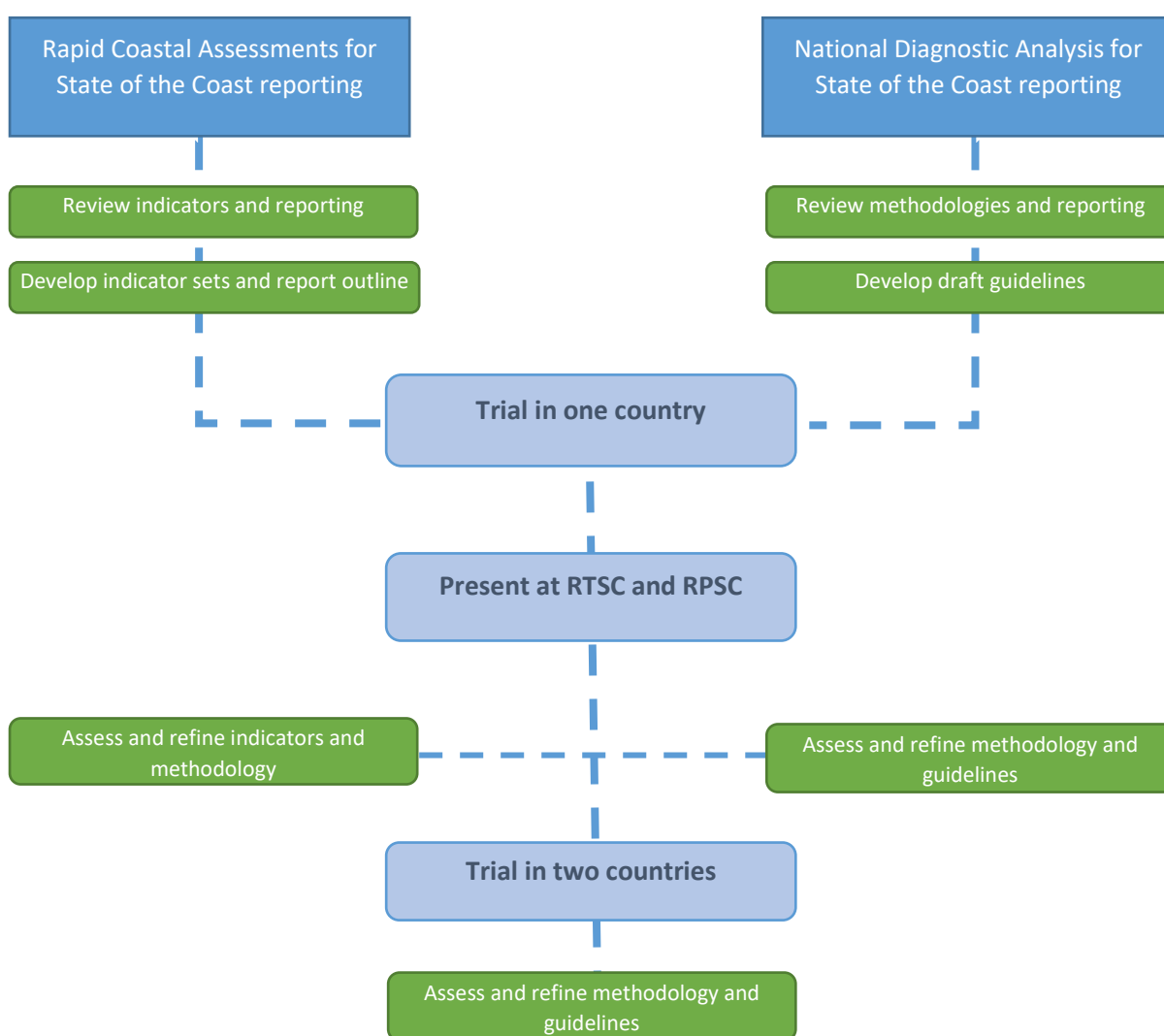


Figure 1: Diagram of development process for state of the coast reporting

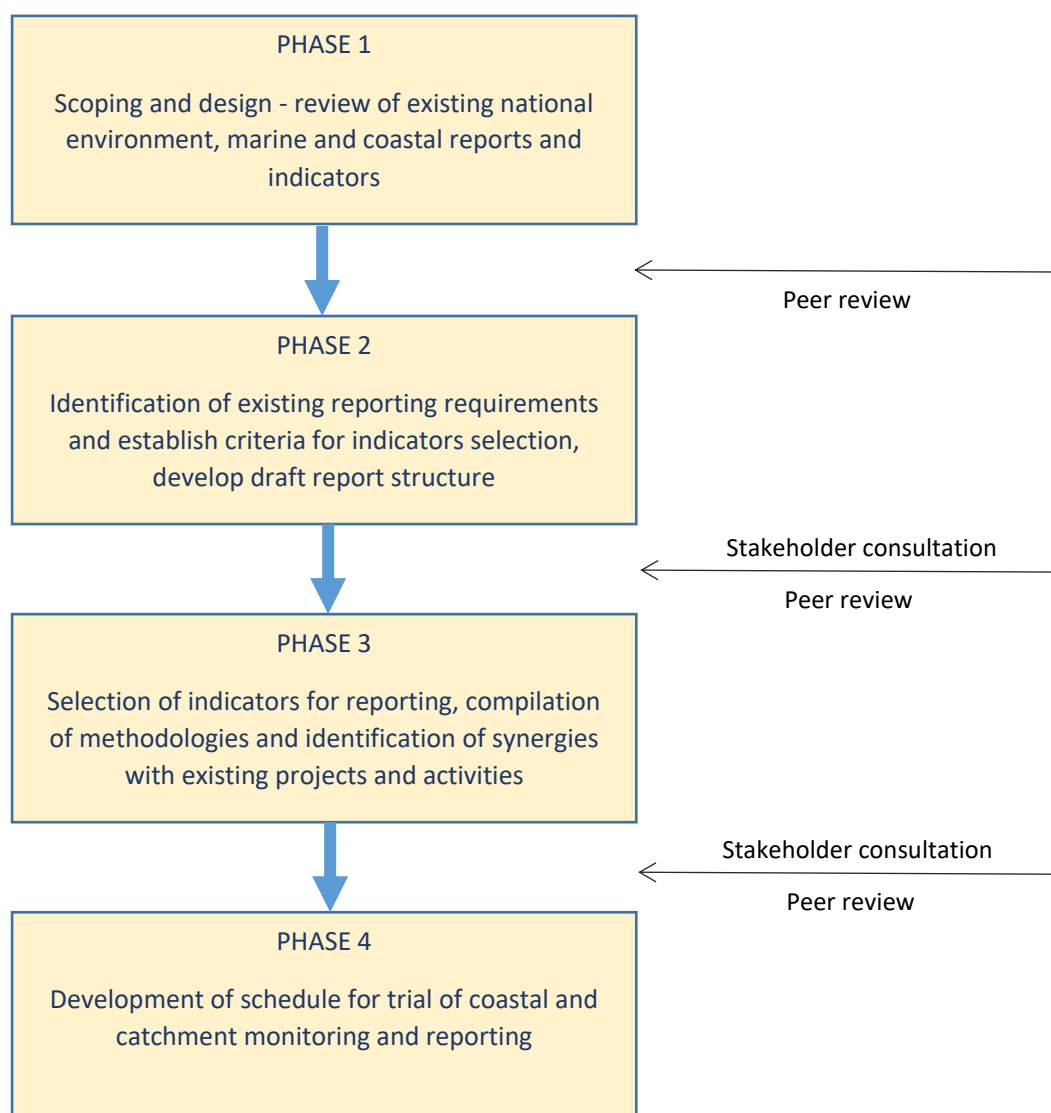


Figure 2: Schematic of SoC steps taken to date

## 2. Considering International Examples

To assist the RPCU in determining what should constitute the core components of a State of the Coast report for Pacific Island Countries, a brief analysis of 12 international State of the Environment/Coast/Biodiversity/Marine reports has been conducted. This was to identify some common characteristics of national level environmental assessments.

1. **The DPSIR Framework:** A framework model that assembles elements under one of the following components Driver, Pressure, State, Impact, and Response. It was originally developed by the OECD as the Driver-State- Response model and has since been extended and widely adopted for many integrated environmental assessments.
2. **Assessment summaries:** Describes the results of core indicators monitored and a trend score for simple comprehension.
3. **Key findings:** Describes in more detail some of the key findings of each section.
4. **Socio-Economic Indicators:** describes the social and economic elements affecting the health of coasts

5. **Governance Indicators:** describes the governance and management responses to impacts to catchment and coastal ecosystems.
6. **Environmental Indicators:** describes the environmental state and impacts of catchment and coastal ecosystems.
7. **Country setting:** describes broadly the biophysical setting, climate, hydro(geo)logy, oceanography etc of the country.

Broadly, the reviewed documents could be separated in to two groups. Those that identified specific indicators for monitoring and reporting, and those that used available data to describe various aspects of the coastal environment.

### 2.1. DPSIR Framework in Relation to R2R Management

The DPSIR framework has been widely used by the international community over the past decades. The framework is seen as giving a structure within which to present the indicators needed to enable feedback to policy makers on environmental quality and the resulting impact of the political choices made, or to be made in the future. It is based on describing the causal chain from driving forces to impacts and responses. In this way it is similar to the Diagnostic Analysis approach of conducting causal chain analysis of perceived problems and their societal root causes in order to identify most effective remedial actions.

The DPSIR framework will form the basis of the National State of the Coasts reports and is complimentary to the diagnostic analysis exercise and subsequent report that will also developed in each country. The diagnostic analysis approach is considered in more detail in discussion document SPC/GEF-R2R/RPSC.2/14.

The aim of managing coastal and water resources is to safeguard human health whilst maintaining sustainable marine and freshwater, and associated terrestrial ecosystems. It is therefore important to quantify and identify the current state of, and impacts on these environments and how they are changing over time.

*What is causing the problem?* – Pressures on the environment

- Human – domestic and urban
- Industrial
- Agricultural

State of the coasts and water

- How is it? (nutrients, biological contaminants, ecological quality....)
- How much is there? (runoff, freshwater demands, biodiversity...)

Time trends

- Getting better or worse or no change
- Within or outside agreed limits?

Response of actions and policies

- Are they working towards targets?
- Are they effectively managed and enforced?

The DPSIR model can be used as an analytical framework for assessing catchment and coastal issues. This allows a comprehensive assessment of the issues through examination of the relevant **Driving** forces and **Pressures** on the environment, the consequent **State** of the environment and its **Impacts**, and the **Responses** undertaken, and of the interlinkages between each of these elements. A generic DPSIR framework is shown in Figure 3 .

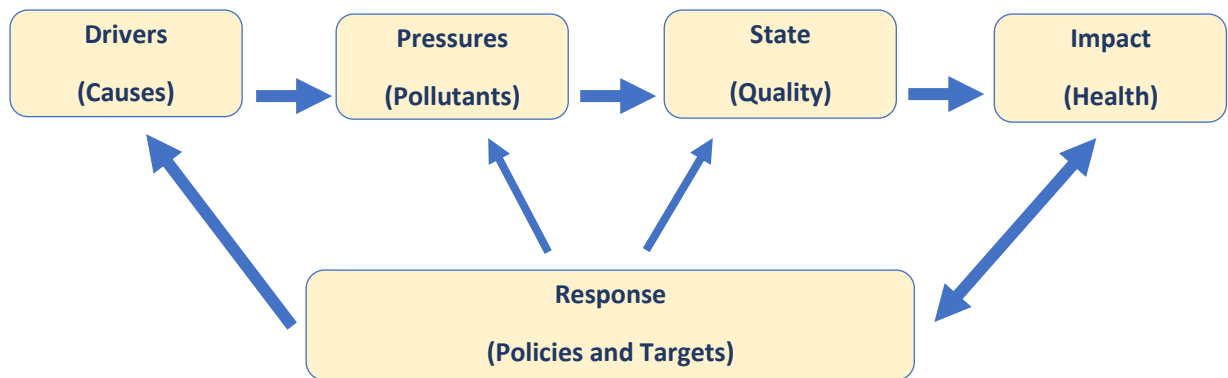


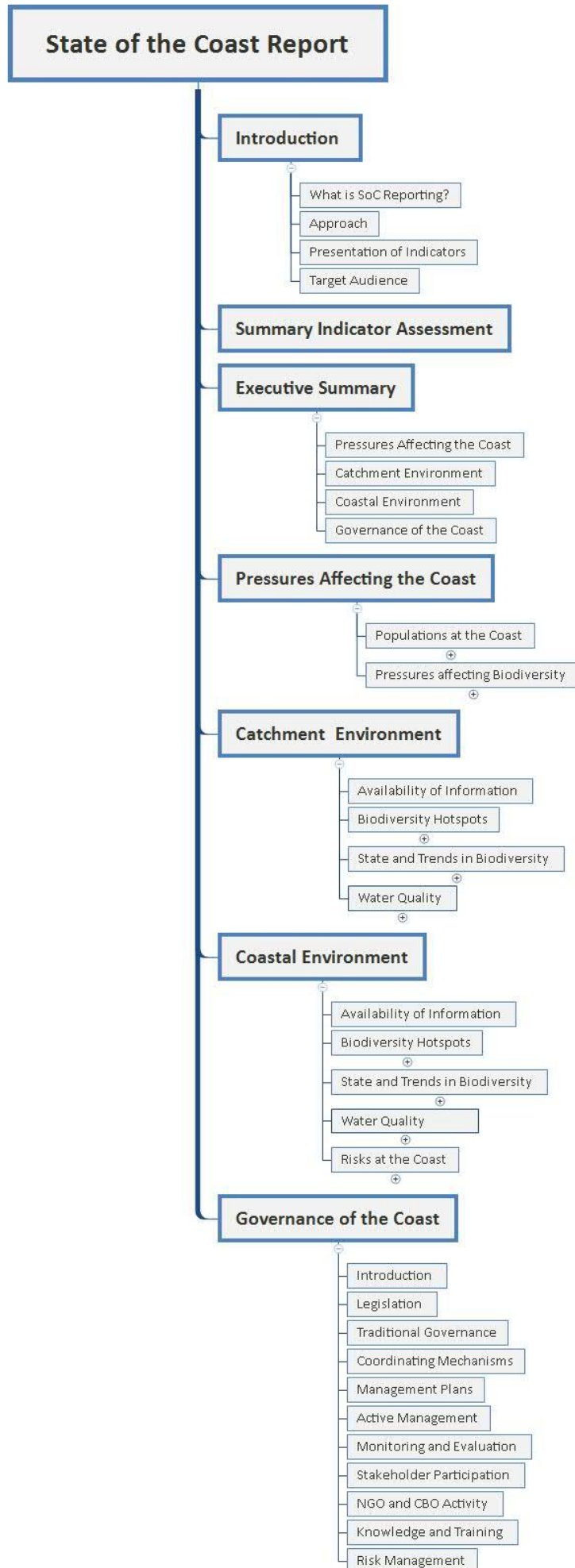
Figure 3: Generic DPSIR framework

### 3. State of the Coast Report Structure

The State of the Coast Reports will be developed concurrently with the State of the Coast Diagnostic Reports as described above. Much of the general information that many similar international reports contain will be provided in the Diagnostic Report. It is therefore suggested that the State of the Coast Report remain indicator specific. This has the following benefits:

- Identified indicators are those that are already monitored or can easily be monitored by countries over time
- Consistent format and indicators across the region
- Allows the report to be updated periodically (~ 5 years) and trends established
- Keeps the report concise and accessible
- Synchronises indicator data with online databases and GIS mapping

Figure 3 provides a diagram of the State of the Coast table of contents. Each section is linked to the specific indicators that were developed through regional consultations as described in discussion document SPC/GEF-R2R/RPSC.2/12.



## *Recommendations*

It is recommended that the Regional Program Steering Committee give consideration to defining core elements of a State of the Coast Report. Given the international standards for environmental reporting it is suggested that attention of the Committee be directed at considering the core elements of a State of the Coast Report as follows:

- **Summary Indicator Assessments:** compilation of all indicators measured for the report with information on the grade of the indicator; whether the trend is up, down or no change and; an indication of the quality of the data used to measure the indicator.
- **Pressures affecting the Coast:** including description of the nature of pressures within the DPSIR framework
- **Catchment Environment:** a detailed description of the indicators that describe the current state of the catchment environment. Includes description and rationale, data requirement and result for each specific indicator or set of related indicators.
- **Coastal Environment:** as for catchment environment section
- **Governance of the Coast:** a detailed description of the indicators that describe the governance and management responses that are related to the coastal and catchment environment. Includes description and rationale, data requirement and result for each specific indicator or set of related indicators.

The RPSC may also wish to charge the Regional Science and Technical Committee with refining:

- ***Indicators to be used in the development of National State of the Coast Reports***
- ***Grading criteria for ranking the state of indicators and quality of data used***