











RSTC5 WP.4 Date: 17 July 2019 Original: English

Fifth Meeting of the Regional Scientific and Technical Committee for the GEF Pacific Ridge to Reef Programme

Nadi, Fiji 28th July 2019

Revised Strategy on IDAs & SoCs (Theory of Change) (Rec. 6)

Recommendations:

The Committee is invited to:-

- i. **Review** the proposed Theory of Change pertaining to steps taken in-country to mainstream and integrate R2R concept;
- ii. **Identify** technical inputs wherein the elements may not be technically feasible, are scientifically unsound, or are socio-economically (and culturally) unacceptable, **and provide** practical alternatives to mitigate such shortfalls;
- iii. In consideration of the changes above, **agree** that SPC trials these changes in one or more countries, if practical, and report outcomes to the Committee for further consideration; and
- iv. **Note** the revised milestone indicators and **discuss** possible implications, if any.

Introduction:

- 1. To date the science-policy approach towards mainstreaming and integrating the ridge to reef concept and principles has been piece-meal. The International Waters Ridge to Reef Project (IW R2R) is currently employing the rapid assessment of coastal areas (RapCA) and island diagnostic analysis (IDA), towards developing State of Coast (SoC) reports and national Strategic Action Plans. These are the only tools developed, and approved for trialling by the Committee.
- 2. SPC is now presenting two additional conceptual frameworks for the consideration of this Committee. The first is the conceptual design of the procedures for identifying and prioritising coastal areas for protection and conservation (see RPSTC-4/WP.4 iv); and the second is the theory of change outlined in this paper, RPTSC 4/WP.2), which sets out clear steps in the science-policy approach required for mainstreaming the R2R concept. This paper also responds to the Mid-term Review recommendation 6 that SPC presents "revised strategy for IDAs/SoCs to the Committee and national steering committees."
- 3. In setting out this theory of change proposal, there is an underlying premise that this work is customisable. Countries can chose to participate in all, some or none of the activities described below and all activities can be completed through the national IW R2R Project Manager and lead agency in close consultation and with the support of the R2R Regional Programme Coordination Unit (RPCU).
- 4. The IW R2R Project Document specifies the outcomes required to effect mainstreaming of the R2R concept, as follows:
 - (i) Outcomes 1.1 Successful pilot projects testing innovative solutions involving linking ICM, IWRM and climate change adaptation
 - (ii) Outcome 1.2 National diagnostic analyses for ICM conducted for prioritizing and scaling-up key ICM/IWRM reforms and investments
 - (iii) Outcome 3.1National and regional strategic action frameworks for ICM/IWRM endorsed nationally and regionally
- 5. To achieve outcomes mentioned in para. 4, the following scientific and technical processes will be carried out: Rapid Assessment of Priority Coastal Areas (RAPCA), Island Diagnostic Analysis (IDA), State of the Coast Report preparation, Strategic Action Framework and Planning. Table 1 shows the processes mentioned and how the concept is applied according to the Ridge to Reef landscape.

		Ridge to Reef Continuum				
Science to Policy Processes	Specific Interventions			Coasts	Marine/ Ocean	
Island Diagnostic Analysis	Conduct of an Island-wide assessment	Yes	Yes	Yes		
Rapid Assessment of Priority Coastal Areas	Conduct of specific pilot site assessment	Yes	Yes	Yes		
State of the Coasts	State of the coast report	Yes	Yes	Yes		
Strategic Action Plan	Prioritization and Planning (e.g. catchment management, coastal	Yes		Yes		

	management, habitat protection, restoration, etc.)				
Pilot testing of appropriate/select Stress Reduction measures	Resource mobilization for financing, Investment Planning and Promotion	Yes	Yes	Yes	
Institutional Strengthening ((Inter- Ministry Committee, Roundtable networks, etc.)	Capacity building (e.g. training, workshops and the post-graduate course certificate/diploma)	Yes	Yes	Yes	
Cross-cutting issues	Results-Based Management, knowledge management, and gender	Yes	Yes	Yes	

Table 1: Science to Policy process according to the Ridge to Reef landscape

6. The purpose of this document is to describe the path that current and future national IW R2R projects may follow to mainstream the ridge to reef concept and evidence-based planning approaches into national and local governance mechanisms. This pathway uses the steps set out in the revised strategy for IDA/ SOC or Theory of Change appended as **Attachment 1**.

Science-Policy Approach

- 7. Pacific Island Countries face similar threats to their fresh and coastal water systems and biodiversity, covering land, forest, agriculture and coastal/ marine sectors. The assessment and prioritisation of these threats, and responses to them, are often based on conjecture and sometimes speculations not always science or evidence based.
- 8. To provide an evidence-based and inclusive process, the Regional IW R2R Project has developed a cascading approach to identifying national priority areas for ICM/ IWRM interventions or actions. This approach maximises existing data and stakeholder input, and reduces the amount of time and resources needed to characterise priority areas.
- 9. The identified priority areas are characterised based on socio-political and environmental factors, and further informed by spatial modelling that identifies priority areas or "hot-spots" nationally, locally, or at site level, noting that the latter may not be useful in small atoll countries where priority areas are known and documented.
- 10. Information gathered produces a detailed assessment of the ecological state of an area, human activities and the main risks, and generate policy options for interventions based on collated data and stakeholder input. Thematic maps are generated to assist national stakeholders in decision-making. These maps and analysed data compiled into a national State of the Coast Report that provides communities and decision makers a snapshot view of environmental health and options. All the above knowledge is used to support formulation of national ICM/ IWRM reforms and investment plans.

Stepwise & cascading approach

11. The following (Table 2) presents the stepwise and cascading approach of the R2R Science-Policy interface. It demonstrates R2R mainstreaming takes place at every step of our science to policy approach. The details are appended in *Attachment 1*.

Step	Description	Outputs	Stakeholder Engagement
1	R2R Mainstreaming Team and Scoping	Functional Mainstreaming team Review and opportunities for mainstreaming R2R	National and community stakeholder participation in process
2	Baseline and Data Collection	Primary and secondary data collated into central database Pilot Site Diagnostic Report	National teams and community participation in field surveys
3	Diagnostic analysis workshop	National Island Diagnostic Analysis Report	National teams (including people representing the pilot site, local leaders and skilled interested individuals from various groups)
4	Spatial Prioritisation Procedure	National scale thematic maps (urban pressures, marine vulnerability, fisheries) Catchment scale thematic maps (catchment health index, coastal heal index, marine health index)	Community group and national level participation
5	State of the Coast Report	National State of the Coast Report	National stakeholder participation
6	Strategic Action Framework	National Strategic Framework for ICM/IWRM	National stakeholder participation

Conclusions & Recommendations

- 12. The Committee is requested to consider and endorse the trialling of this Theory of Change or revised strategy for the preparation of IDAs/SoCs.
- 13. The Committee is invited to:
 - i. **Review** the proposed Theory of Change pertaining to steps taken in-country to mainstream and integrate R2R concept;
 - ii. **Identify** technical inputs wherein the elements may not be technically feasible, are scientifically unsound, or are socio-economically (and culturally) unacceptable, **and provide** practical alternatives to mitigate such shortfalls;
 - iii. In consideration of the changes above, **agree** that SPC trials these changes in one or more countries, if practical, and report outcomes to the Committee for further consideration; and
 - iv. **Note** the revised milestone indicators and **discuss** possible implications, if any.

Attachment 1. Theory of Change on R2R IW Science-Policy Approach

Step One: R2R Mainstreaming Team & Scoping

- 1. The first step of R2R mainstreaming focuses on identifying and engaging stakeholders. Project staff and people indirectly supporting implementation require upskilling and training to understand the R2R concept and principles and practical impacts on delivering on targets.
- 2. Project countries support the project through signed MOUs and by committing national STAR allocations in support of the regional project in its initial stage of negotiation signals buy-in and commitments. However, priorities and circumstances change and countries may opt to revise certain levels of their commitments in their national project logframes and co-financing.
- 3. Identify and mobilise a national R2R mainstreaming team or similar to lead and participate in all IW R2R regional and national works. National Consultants with the right mix of expertise and experiences can be hired as local Team Leaders to lead technical and scientific work streams. Existing working groups or teams may already established for work set out under different processes be considered rather than establishing new ones.
- 4. The team members should include people representing the pilot site, local leaders and skilled interested individuals from various groups (community, church, youth, women, NGOs) and relevant national agencies. The national IW R2R Project Manager will act as Secretariat for the team. The team will make recommendations, for approval through official national channels and national PSCs or Boards, on what aspects of the R2R mainstreaming process are conducted in country.
- 5. With support from the RPCU, national Project Managers are expected to:-
 - (i) map existing national sustainable development planning processes;
 - (ii) identify opportunities to mainstream R2R approaches through these frameworks.
 - (iii) facilitate review of legal instruments relating to land, water, forests and coastal management;
 - (iv) facilitate discussion of results emerging from 13(i)-(iii) above,
 - (v) develop an approach for mainstreaming the results; identify opportunities for harmonising governance systems across sectors and between national and local frameworks; and, and identify entry points for R2R mainstreaming.
- 6. National approaches may look very different and the activities described below can be used to support existing national planning processes in a variety of ways dependant on the unique position of each country.
- 7. A country's inclination to participate will therefore depend on national development planning processes, governance systems, existing related activities such as the State of Environment exercise national appetite for the expected outputs and outcomes of the work etc.
- 8. A list of potential criteria by which a country could decide to participate is shown below. These criteria are not necessary relevant when considering which site or community to select for R2R science-policy interface.

Criteria (country-level only)	
Is the State of the Environment exercise	
recently conducted or planned to be conducted?	
Has the R2R programme been consistently and successfully implemented in country?	
Are there positive influences available to be part of the activities?	
Are environmental and resource use hotspots well known and characterised?	
Is it considered likely that political drive to incorporate R2R concept and approaches can be generated?	
What other planning mechanisms are in place?	

Step Two: Baselines & Data Collation

- 9. Data will be collated for the pilot site and relevant national level data. This will be led from the RPCU with assistance from the national Project Managers and national Consultants or Team Leaders in sourcing documents and facilitating sharing. Resulting data and information will be stored in a central regional database managed by SPC. Data collected will be used in Steps 3-5.
- 10. In some countries, there will be gaps in recent data, particularly for the pilot site areas. In this case a field survey (RapCA) will be organised to collect primary socio-economic, governance and environmental data. Additionally there are data requirements for the land-sea model in Step 4 and the field survey will be designed to ensure comprehensive collection of this marine and terrestrial ecosystem data.
- 11. Field surveys will be planned using local experts and equipment where available, with close consultation between the RPCU and the national IW R2R Project. If there is a need to bring in external resources, the RPCU will provide advice. Involving community groups from the pilot site is highly recommended during the field surveys, particularly in those countries that are also developing participatory environmental monitoring programs to support coastal and/or catchment management plans.

Capacity Building – Although field surveys are designed to meet regional IW R2R Project data requirements they are also intended to continue building capacity in conducting socio-economic and environmental field surveys for national agencies. In the first instance, national agencies will be approached to conduct the necessary field surveys, although the Regional IW R2R Project will fund this exercise. Where external support is necessary, identified staff from relevant agencies will be encouraged to assist in the surveys and gain hands-on experience. Additionally, interested community members or groups will also be encouraged to attend field survey work where appropriate and safe to do so.

R2R Mainstreaming – The process of collecting and presenting a wide range of data highlights the R2R approach as it starts to draw comparative conclusions between interrelated environmental and social systems. Data and observations of note are shared with the pilot site community for contributions to the final Pilot Site Diagnostic Report. This is also intended to stimulate appreciation

of how to turn field surveys into decision support tools, and highlight areas of connectivity on the ridge to reef continuum.

Participatory Process – community groups and local agency staff are highly encouraged to assist with field surveys. Data and observations of note are shared back through the community groups particularly, for their comments and feedback on the final Pilot Site Diagnostic Report.

Output	Complete set of R2R Relevant data at pilot site and national level						
	Field Survey Results						
	Pilot Site Diagnostic Report						
Expected time	2-4 weeks for data collation						
	4 weeks planning for field survey						
	1 week field survey conduct						
	2-3 week write draft Pilot Site Diagnostic Analysis Report						
	2 week consultation and revision of Pilot Site Diagnostic Report						
	o Total time 2-3 months						

Step Three: Diagnostic Process

- 12. The *stakeholder groups identified* in the above process will also participate in the diagnostic analysis process to ultimately, identify social and politically acceptable interventions or reforms to improve livelihoods and ecosystem health at the identified catchment/ coastal area.
- 13. The *diagnostic concept* has been derived from the Global International Waters Assessment (GIWA), the GEF Transboundary Diagnostic Analysis, and Pacific IWRM Diagnostic Analysis methodologies. The substance of these methodologies have been adapted to suit the broader ecosystem approach of the Ridge to Reef Programme and include terrestrial and marine ecosystems as well as socio-political users of resources.
- 14. This diagnostic process provides a structured approach to identify, understand and prioritise key issues/ problems/ threats using range of risk assessment tools, problem-tree and causal links analysis. The diagnostic analysis will scale the relative importance of sources and causes (from the 'immediate' to the 'root') of the problems within ridge to reef platform, and, to identify potential preventive and remedial actions. The stakeholders will drive most of these results during the consultations.
- 15. In brief, the process will consist of five steps:-
 - (i) Identify and agree on the scope, objectives and responsibilities pertaining to the focus area under investigation using the diagnostic process;
 - (ii) Identify the Issues or Problems & impacts
 - ii.1. Problem articulation: identification & analysis of the problems and threats (and the environmental and associated socio-economic impacts) using problem-tree and causal-link analyses;
 - (iii) Use risk assessment and problem-tree analysis to assist prioritise Issues and problems
 - iii.1. Problem understanding: causal loop diagrams of interconnecting problems;
 - iii.2. Problem analysis (basic category) system & qualitative risk assessment
 - (iv) Developing priority systems and plans for actions and interventions
 - iv.1. The actions will address the causes of threats and impacts on ridge to reef ecosystem goods and services in *Country X* or *Demonstration Site Y* through a Strategic Action Plan

- iv.2. the actions proposed will form part of the framework for an ongoing Strategic Action Framework for sustainable use and conservation of ecosystem goods and services, increased community resilience and improved livelihoods.
- (v) Policy evaluation: recommendations for policy or reform.
 - v.1. Review of diagnostic analyses at least every 5-10 years in order to adapt the information and the management strategy to changing political, administrative, scientific and ecosystem level circumstances and parameters.
- 16. Stakeholder groups may be collectives or separated into pre-identified groups such as resource user groups, separate men and women groups, local expert groups, profession etc. These same groups participate in Step 4 & 5. The national IW R2R Project Manager is responsible for coordinating the various consultations and workshops held throughout this process. The national consultant or Team Leader is responsible for technical aspects of the diagnostic process. Noting that the entire process could take up to three months and will require close coordination with RPCU.
- 17. A final National R2R Diagnostic Report can be prepared that combines all of the outputs with generic national level physical, socio-economic and political characteristics. This report forms the basis of ongoing R2R mainstreaming efforts.

Participatory Process – The diagnostic process is highly participatory and success is dependent on the committed ongoing involvement of all invited stakeholder groups. National IW R2R Project Managers will lead the facilitation of the process and organise all the stakeholder consultation workshops and meetings. Stakeholder groups drive the process and identify resources, activities, pressures and ultimately any decisions for reform or intervention.

Capacity Building - National agency staff and stakeholders participating driving and the IDA process will be trained and upskilled in the use of the IDA framework for the identification and prioritisation of problems and their root causes, and proposed actions to mitigate the problems. The diagnostic analyses workshops provide an opportunity for stakeholders to also increase their skills and confidence to map out strategic policy actions and interventions that are not only addressing the priority problems but, most importantly, strengthening and improving current policy and reforms pertaining to the protection of ecosystem goods and services, improved livelihoods and resilient communities.

R2R Mainstreaming – The diagnostic process is a driver of R2R mainstreaming nationally and subnationally or community level. Throughout the process, participants are required to think about the interrelated nature of ecosystems and livelihoods, and to decide collectively on a course of action that will benefit the sustainable use of resources or conservation of ecosystems (whichever is deemed the objective). Key points noting different levels at national, site and community require different approaches of facilitating workshops for better buy-in and generating quality results:-

- (i) Starting point of the process depend on what point a country is on the continuum.
- (ii) If natural resource management policy and plans exist these can be incorporated in to the systems simulation to analyse their effectiveness at producing the desired outcome.
- (iii) Strategic, dedicated participation in the diagnostic process will stimulate cross-sectoral dialogue on natural resource and development planning and invite development of policy options that better reflect multiple user/ uses objectives.

Output	R2R Island Diagnostic Reports						
Expected time	Problem articulation – 5 days stakeholder workshop (assuming different groups)						
	Problem understanding – 5 days stakeholder workshop (assuming different groups)						
	Data processing & reporting – 2 weeks including data input and run Policy evaluation – 5 days stakeholder workshop (assuming different groups and one plenary)						
	Total time including training ~ 3 months						

Step Four: Spatial Prioritisation Procedure

- 18. The spatial prioritisation procedure will follow a cascading approach to best utilise existing data, customary knowledge and local expertise to identify conservation priority areas on land and in the coastal environment. The procedure will identify national-scale ridge to reef priority sites and develop catchment-level linked land-sea models to characterise the areas.
- 19. The <u>national level prioritisation</u> procedure will utilise a rapid assessment methodology, integrating all existing and available biophysical and human activity information. Indicator sets and/or groups of indicators will be used to characterise the state of terrestrial and marine, social and ecological systems and will be standardised to a simple value scale ranging from 1 (very low) to 5 (very high). Collection of data will follow a standard process for all countries, and where gaps exist, these will be included in the rapid field survey assessments of the sites.
- 20. Customary knowledge associated with coastal ecosystems and traditional management practices informs the selection of indicator sets or groups. Additionally, community participation and expert knowledge will help inform the value scores attributed to the sets or groups.
- 21. Datasets will be standardized into spatial grids for which each cell will acquire a value for each indicator. Land-sea impacts will be estimated by watershed according to watershed health index, coral reef habitat area, rainfall, land use/cover, and importance to local communities. Spatial grids will then be integrated into cartographic products to be discussed openly among stakeholders.
- 22. The <u>catchment-scale linked land-sea model</u> will spatially prioritise upland and coastal conservation efforts across a selected priority watershed. This is a spatially explicit model to quantify the effect of land-use change on coral reef ecosystems. Spatial patterns in water quality are linked to coral reef ecosystem health using benthic indicators known to respond to land-based runoff. Model inputs include fish indicators that represent important local resources, identified in consultation with decision makers and local communities. Using a spatial analysis, coral reef areas vulnerable to existing land-use runoff based on selected benthic and fish indicators will be determined and traced back to upland areas within the watershed to identify priority areas for management actions.
- 23. The main outputs of the spatial prioritisation model will be:-
 - (i) maps of marine environment quality,
 - (ii) maps of coastal and watershed quality,
 - (iii) map of human pressures on landscapes and seascapes,
 - (iv) value scores are combined to create a national-scale conservation prioritization map to inform selection of sites for management interventions (Figure 1).

Participatory Process – Local experts, stakeholders and artisans will be involved in sharing their traditional knowledge of ecosystems and management practices in the selection of indicator sets or groups. The same groups will be involved in attributing scoring across the indicator sets or groups, thus reflecting the unique values and situation of each site.

Capacity Building – Most countries have capable and talented GIS and information management officers in the Department of Environment, Department of Land or similar. Training will be provided to a select group of users on the use and maintenance of the model systems, including how data sets were arrived at and how they interrelate.

R2R Mainstreaming – the participatory process and capacity building aspects of the prioritisation procedure will highlight the interconnectedness of ecosystems. It will show empirically the vulnerability of some because of the misuse of others. Community groups, local and national governments will explicitly use the model outputs as R2R planning tools. These outputs feed directly into the diagnostic process and the identification of reforms and investment recommendations.

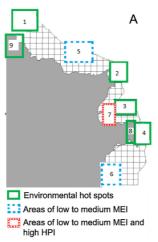


Figure 1: example of identification of hotspot areas using scored indicator sets and/or groups. Taken from Alvarez-Berastequi D, et al (2013)

Output	maps of a) marine environment quality, b) coastal and watershed						
	quality, and c) human pressures on landscapes and seascapes						
	national-scale conservation prioritization map to inform selection of						
	sites for management interventions						
Expected time	Data collection (included in Step 2) – 5 weeks						
	Model preparation – 3 weeks						
	Maps and decision support tools – 2 weeks						

Step Five: State of the Coast Report

24. A State of the Coast report is a tool to strengthen evidence-based planning for natural resources and used to support national Strategic Action Frameworks for ICM investments. They will be prepared nationally through extensive consultations with relevant stakeholders and draw on existing data and that collected through the above activities. The data sets used for the report have been developed to align with existing national data collection, and reporting requirements so as not to become burdensome. Linkages between the efforts to identify and evaluate socio-environmental issues and problems, empirical data for priority coastal areas, and identified options for reform and intervention form the substance of the report.

- 25. The State of the Coast report is not a replacement for the ongoing work for State of the Environment reports and has been developed in coordination with SPREP to be complementary. The contents of the State of the Coast can be adapted to reflect the geophysical and political realities of individual countries, though a standard template has been prepared as a starting point for discussion.
- 26. The mainstreaming team will provide guidance on the stakeholder groups to be consulted through the State of the Coast development.

Output	National State of the Coast report		
Expected time	Draft report preparation – 6 weeks		
	National consultations – 6 weeks		
	Final report endorsed – 4 weeks		

Step Six: Strategic Action Frameworks

- 27. The Strategic Action Framework process aims to meet the regional goal of mainstreaming R2R approaches into national development planning, and supports ongoing efforts to improve evidence based planning. This exercise is nationwide and is closely linked with the spatial prioritisation and diagnostic process.
- 28. Countries may choose the consultation process for developing a national Strategic Action Framework to flow freely from these two activities, using the momentum built through them.
- 29. All of the decision support tools developed in previous steps will be used through this consultation process. This includes:
 - (i) Baselines & RapCA outcomes/ reports for pilot sites
 - (ii) Diagnostic reports for pilot sites
 - (iii) State of Coast reports
 - (iv) Conservation prioritisation maps
 - (v) Catchment specific environmental health and resource maps
 - (vi) Policy analysis and evaluation modelling system
- 30. Some countries may identify that rather than developing a standalone Strategic Action Framework, the work is better incorporated into existing high level planning processes. In this case, the evidence based planning tools prepared in Step 3 and 4 are still relevant and can be used to debate various management interventions and actions.
- 31. The mainstreaming team will provide guidance on the stakeholder groups to be consulted during the Strategic Action Framework development.

Output	National Strategic Action Framework for R2R			
Expected time	National dialogue and debate – 6 weeks			
	Draft framework preparation – 4 weeks			
	National consultation and revisions – 6 weeks			
	Final framework endorsed – 4 weeks			

Indicative work plan

41. The timeline and budget presented below is indicative only and does not account for delays in procurement and contracting, or for national public holidays and absenteeism. As can be seen in the indicative work plan, many of the consultation phases are overlapping and this is how the policy evaluation and strategic action framework planning can be brought together. Arrows on the work plan show dependencies between activities. This suggests the national strategic action plan can be developed almost immediately after the completion and adoption of the diagnostic report.

Regional logframe numberin	Activity	1	2	3	4	5	6	7	8	9	Indicative budget (USD)
	Establish and maintain R2R Mainstreaming										
	Team and scoping										
1.1	Data Collation										18000
1.1.1.2	Data collation										
	Field Survey (RAPCA) Planning										
1.1.1.3	Conduct Field Survey (RAPCA)										
	prepare draft Pilot Site Diagnostic Report										
	consultation and revision of report		1								
	present through official channels										
	present through official channels										
1.2	Diagnostic Process										10000
	Planning and training – agree on scope &										
	objectives										
	Problem articulation										
	Problem understanding & prioritisation				7						
	Data processing, reporting and training										
3.1.2	Policy evaluation			T							
	Preparation of National R2R Diagnostic										
1.2.1.	Report					1					
	consultation and revision of report	ļ	Ш								
	present/endorse through official channels		<u> </u>			Щ					
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1.2	Spatial Prioritisation Procedure				1				T		8000
	Data collection										
	Model preparation										
	Develop maps and decision support tools										
	Training for national staff				4		-				
3.1.3	State of the Coast Report										6000
3.1.3	Prepare draft report				*	_					0000
	consultation and revision of report										
	present/endorse through official channels										
	present/endorse through official channels										1
3.1.2	Strategic Action Frameworks										6000
	National dialogue and debate										
	Prepare a draft framework (or incorporate recommendations into existing planning processes)										
	consultation and revision of framework										1
	present and endorse through official channels										