



Pacific Islands Ridge to Reef
National Priorities – Integrated
water, land, forest and coastal
management to preserve
biodiversity, ecosystem services,
store carbon, improve climate
resilience and sustain livelihoods

Session 5: Special Topics

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Spatial Prioritization modelling
Virtual Meeting, October 6 & 7, 2020



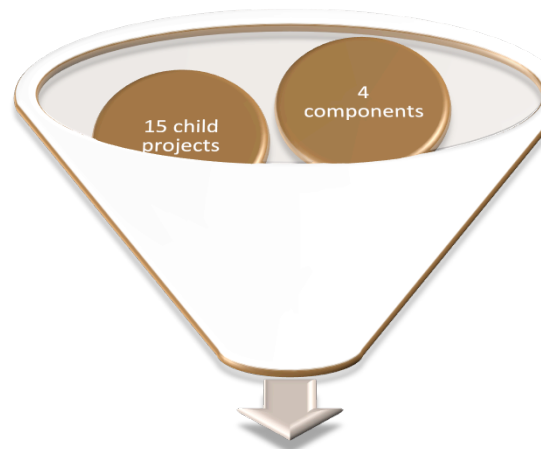
Session 5: Special Topics

1. Reflect on the (modified) approved R2R Science-Policy theory of change adapting to changing circumstances, and provide renewed commitments, if any, towards mainstreaming R2R in either planning process and/or policy development;
2. Reflect on the importance of R2R approach in natural resource management and governance, and the utility of land-sea modelling as a decision support tool and endorse the regional guidelines;
3. Discuss and appreciate the importance of available-accessible data and information sharing, including through the newly developed (and soon to launch) the “Pacific State of Coast Spatial Data Infrastructure for the Pacific Ridge to Reef Programme.”



RATIONALE
SCOPE
BACKGROUND

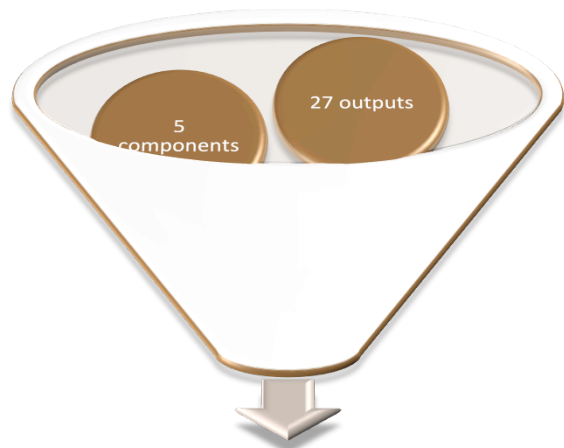




Program objectives

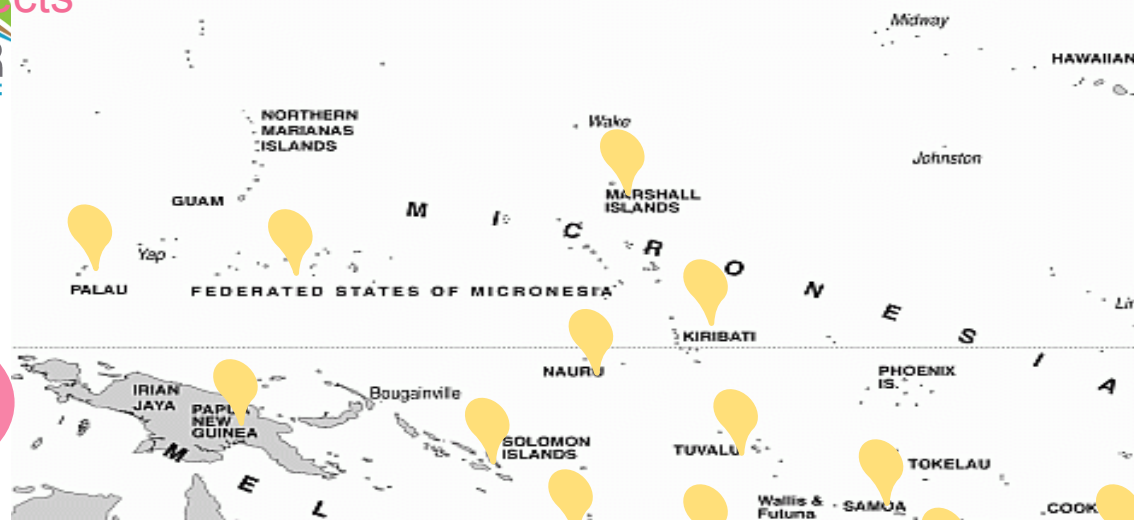
Focal Area	# Outcomes	# outputs
Biodiversity	4	5
Climate Change Adaptation	4	6
Climate Change Mitigation	1	1
International Waters	5	5
Land Degradation	7	7
Sustainable Forest Management/ REDD+	4	4
Total	25	28





Project objectives

To **test** the **mainstreaming of Ridge to Reef, climate resilient approaches** to **integrated** land, water, forest and coastal management in the **Pacific Island Countries** through strategic planning, capacity building and piloted local actions to **sustain livelihoods** and preserve **ecosystem services**



Management Approaches

1. Restored habitat – revegetation programs
2. Municipal waste pollution reduction (aquifers, coastal areas)– sanitation system upgrades and dry litter piggeries
3. Catchment protection measures – sustainable land use, agricultural best practice, ICM plans
4. Conserved/protected wetlands, fish refugia – coastal and fisheries management plans
5. Participatory environmental monitoring programs
6. Ecosystem process and habitat health monitoring programs
7. Assessment of eco-sanitation and dry-litter piggery technologies

Output Indicators	Number of Countries	Measure	Unit
Municipal Waste Pollution Reduction	4	Reduction in TN, TP, BOD	kg/yr
Pollution Reduction to Aquifer	2	Reduction in TN, TP, BOD	kg/ha/yr
Restored Habitat	3	Area restored/revegetated	ha
Conserved or Protected Wetland or Fish Refugia	2	Area protected	ha
Catchment Protection Measures	6	Area under improved management	ha



Project Objective: To test the mainstreaming of 'ridge-to-reef' (R2R), climate resilient approaches to integrated land, water, forest and coastal management in the PICs through strategic planning, capacity building and piloted local actions to sustain livelihoods and preserve ecosystem services



IW GEF R2R Science to Policy – Theory of Change

Impacts
Outcome
Outputs
Activities

Increased knowledge and understanding around R2R approach

Greater use of science based information in decision making process

Improved institutional setting for informed decision making and action

1.1 Successful pilot projects test innovative solutions that link ICM, IWRM and climate change adaptation

1.2 Diagnostic analysis for prioritizing/ scaling up key ICM/ IWRM reforms & investments

3.1 National and regional strategic action frameworks for ICM/IWRM endorsed nationally & regionally

IW Pilot Site Diagnostic Reports
National Diagnostic Reports
Characterisation and Prioritisation Procedure Guidelines

Effective data and knowledge sharing

Effective networks

National State of the Coast Reports

Assessment and advice to organisations

National Strategic Action Frameworks for ICM/IWRM

Plans and Policies

Data collation and field surveys

Technical support

R2R Networks

R2R Training

Stakeholder engagement

Participatory analysis and decision making



Action Plan for IW Science to Policy Approach

Step One

R2R Mainstreaming Team & Scoping

- Team leads and participates in all Regional and National IW R2R program of activities
- include people representing the pilot site, local leaders and skilled interested individuals from various groups (community, church, youth, women, NGOs) and relevant national agencies
 - national IW R2R Project Manager will act as Secretariat for the team

Step Two

Baseline and Data Collection

- Data will be collated for the pilot site and relevant national level data
- Gaps in recent data for the pilot site will be filled with field survey (RAPCA)
 - Data collected will be used in steps 3-5

Step Three

Diagnostic Process

- Problem understanding and articulation

Diagnostic Process

- priority systems and plans for actions and interventions
- Policy evaluation and recommendation

Step Four

Spatial Prioritisation

- national-scale prioritization map to inform selection of sites for management interventions
- Map of marine, catchment health, and human pressures on land - seascapes

Step Five

State of the Coast Report

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.

Step Six

Strategic Action Framework

- All of the decision support tools developed above will be used in this process
- Countries may choose to incorporate into existing high level planning

- Joint planning, analysis, and communication of findings
- Share field and secondary data for input into models and SoC Reports

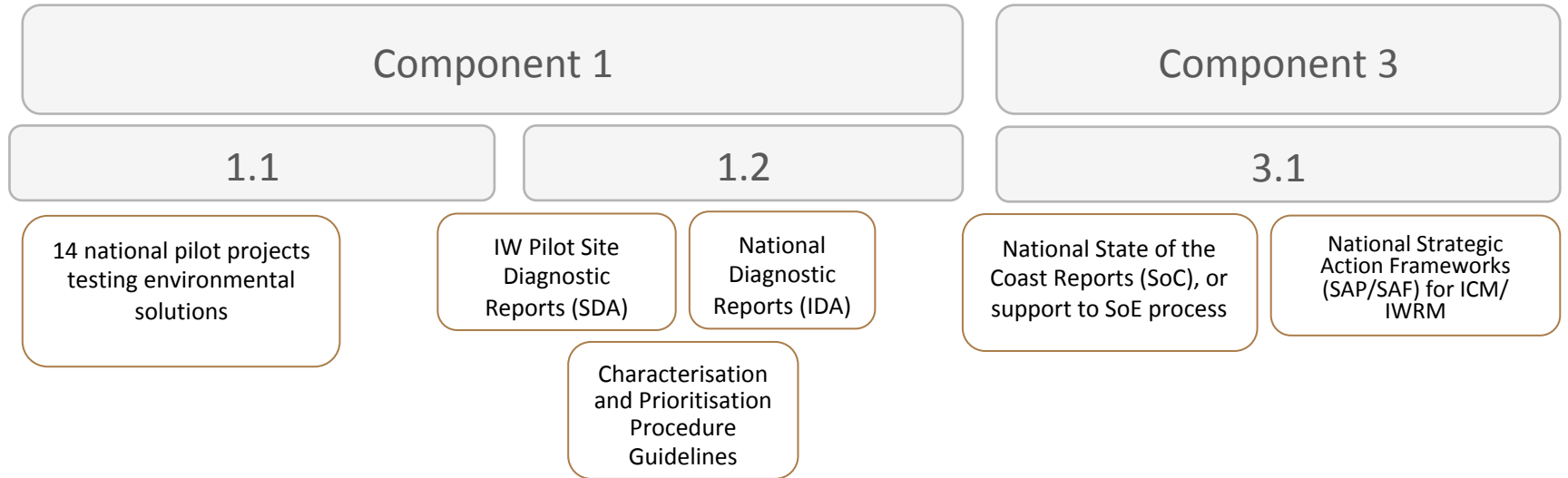
- Support stakeholder participation in diagnostic process and SoC consultations

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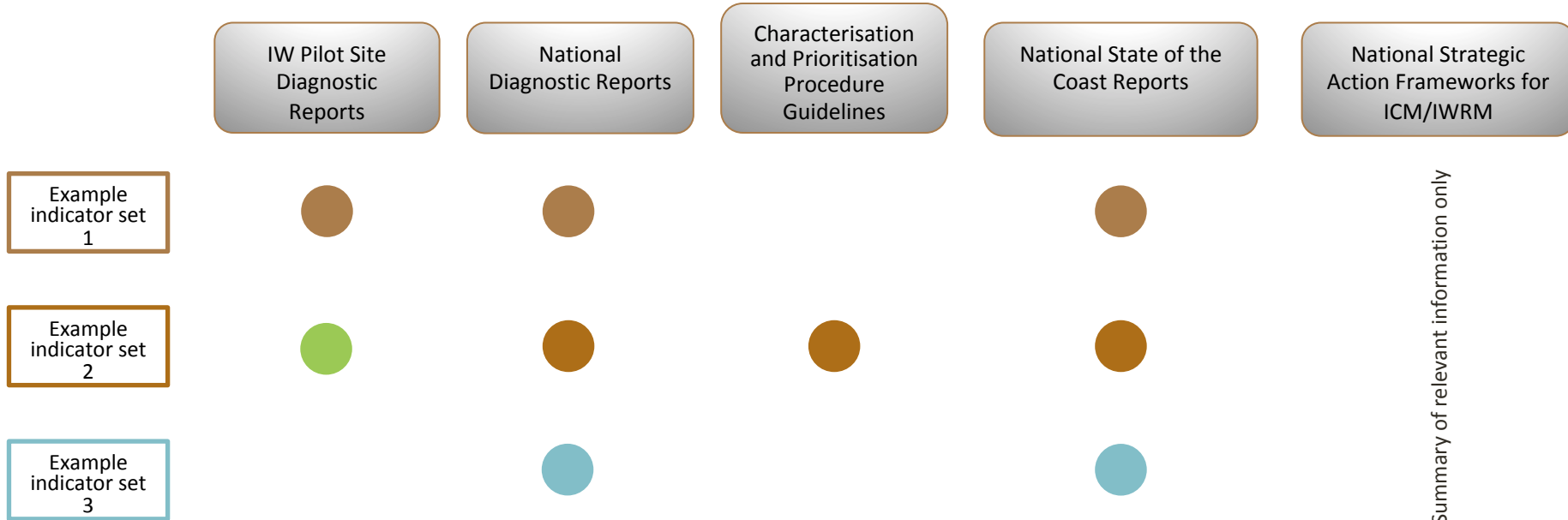
- Joint planning for policy reform
- Support stakeholder participation in consultations

STAR Projects can collaborate during these stages

Overview of IW R2R Science Deliverables



Data requirements for IW R2R Science Deliverables



Project Goals

National scale approach:

Adapt & apply a spatially-explicit framework with scenario planning identify national priority areas that benefit land & sea

Local scale approach:

Downscale this framework to test the effect of proposed local R2R management actions in one priority watershed



Pacific R2R Program Expected Outcomes

- Improved terrestrial and marine biodiversity conservation in priority catchments and linked coastal areas
- Enhanced policies regulations and institutions for integrated Ridge to Reef approaches in place in PICs
- National and local level capacities for ICM IWRM SLM and SFM improved to enable best practice in integrated climate resilient Ridge to Reef approaches in natural resource management

Pacific R2R Program Expected Outputs

- Integrate policy frameworks at the national and sub-national levels towards combined land water forests and coastal biodiversity management formulated and adopted in all PICS
- Local ICM plans show integration with IWRM and land and forest management plans in around 10 PICS
- National coastal diagnostic analyses integrated with existing IWRM-related diagnostics in 14PICS National 'State of the Coast' Reports

What is generating data in the R2R Program?

- Biodiversity assessments – marine and terrestrial
- Traditional ecological knowledge surveys
- Pilot site environmental monitoring
- Prioritisation modelling
- Fisheries surveys
- Rapid coastal assessments
- Behaviour change stories
- Governance and socio-economic reviews
- Legal reviews
- Gender disaggregated data
- Secondary historical data
- Diagnostic analysis
- Water quality assessments
- Participatory monitoring programs
- Stakeholder reviews



What is this data turned in to?

- Scientific reports and/or articles
- Stakeholder communication products
- Visibility products
- GIS Layers
- Integrated maps
- Presentations
- Baseline assessment reports
- Environmental monitoring reports
- Diagnostic reports
- Policies and plans
- State of the Coast Reports
- Videos
- Decision support tools



How is this data used?

- Establish a baseline scenario
- Inform understanding of ecosystem goods and services
- Supports inclusive and participatory science
- Adaptive management – particularly demonstration sites
- Supports decision making
- Connects communities and stakeholders
- Supports/informs educational material



What else is out there?

- Many national programs and projects generating data and information
- Data is held at various agencies, institutes and organisations
- Need to map out who has what, and where – including what access issues there are



1. Review and assess the changes in the 'modified' R2R science to policy framework and if deemed appropriate;
2. **Consider and approve** the regional guidelines previously endorsed for implementing R2R science to policy strategic framework;