



GEF R2R/ RSTC.6/ Inf.05
Date: 25 September 2020
Original: English

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

Suva, Fiji 19th-20th October 2020

Records of the RSTC 1st Technical Consultation, Nadi, Fiji.



RSTC-TC-S1 Inf.1
Date: 5-7 February 2020
Original: English

First Series Technical Consultation of the Regional Scientific and Technical Committee (RSTC) for the GEF Pacific Ridge to Reef Programme (R2R)

Tanoa International Hotel, Nadi, Fiji
5-7th February 2020

Record of Discussion (Working Draft – 20th February 2020)



RECORD OF DISCUSSION (WORKING DRAFT)

Welcome & Prayer

1. The first series technical consultation of the RSTC for the GEF Pacific R2R was held at Tanoa International Hotel in Nadi, Fiji on the 5th to 7th February 2020. Twenty-four (24) participants from R2R projects in Tonga, Tuvalu, RMI and Fiji, as well as those from James Cook University (JCU), University of the South Pacific (USP), Pacific Islands Forum Secretariat (PIFS), United Nation Development Programme (Suva UNDP Office), GEM-SPC staffs, and members of the R2R Regional Science and Technical Committee (RSTC, attended the technical consultation. The list of participants is appended as **Attachment 1**.
2. The SPC staff and Facilitator, Sam, welcomed all participants to the 1st Series Technical Consultation of the R2R RSTC. The consultation was the first attempt to respond to a decision of the RSTC/ RSC last year aimed at encouraging voluntary participation of national scientists and experts, along with partners in development agencies, regional research institutions and civil societies, in frank and open scientific and technical discussion on matters relevant to the work of the Committee, and provide advice to the RSC.
3. The Fiji STAR R2R project participant, Mr Noa Vakacegu offered an opening prayer for the technical consultation.

Opening Remarks

4. The SPC staff and Facilitator, Sam, briefly outlined the purpose and intent of the consultation and its expected outcomes. Generally, the consultation is consistent with the RSTC TOR and it provides an opportunity to revisit, review, re-examine and re-engage members in scientific and technical discussions expected of the RSTC. The approach for the consultation was to encourage broad inclusive participation, frank and informal discussion on pre-selected topics, support for the development of active and action-oriented efforts, and, clear advice on what needs to be done, and not bogged down with process.
5. The R2R Programme Coordinator, Mr Peter Cusack, gave brief introductory remarks on where we are in R2R, encouraging discussion not only to reflect on current progress of implementation but also future prospects of R2R when the IW R2R project terminates in 2021. The discussion could reflect on what the future should be or look like for R2R? Peter suggested several considerations covering mainstreaming ecosystem goods and services, project to product concept through R2R, and how R2R is applicable to regional goals to climate change.
6. Furthermore, Mr Cusack underlined the importance of goodwill and momentum moving forward taking advantage of global initiatives to help with the progress of R2R programme implementation. Peter sought help throughout technical discussion putting together a concept on the future of R2R for the upcoming RSC formal session, and in turn, can be potentially endorsed and further processed for submission to GEF. The outcomes of this technical consultation are useful to framing a concept note and better leveraged considerations on R2R's future.



Samasoni Sauni
Pacific Community (SPC)



Mr Peter Cusack
Pacific Community (SPC)

7. The RSTC Chair and Facilitator, Prof. Marcus Sheaves, also provided opening remarks, reiterating the fundamental principle of maintaining high quality science to inform scientific and technical advice given to RSC. This means that the RSTC must be seen to be active and action-oriented providing guidance through robust technical discussion on aspects of project implementation such as testing of innovative technologies, review research methods and sampling designs used, and critically assess recommended best practices and upscaling R2R investments.



Prof Marcus Sheaves
James Cook University (JCU)

8. Moreover, Prof. Sheaves emphasised keeping alive the ‘conversation’ going forward post R2R programme. This includes a need **to influence and leverage funding support to continue R2R into the future, in order to realise intended long-term impacts from delivering on domestic aspirations and priorities but also compliance on regional and international commitments and obligations.** Prof. Sheaves stressed that future progress is constrained by limited time and resources, and that 20-months remaining of the IW R2R project is relatively not sufficient to realise high level imperatives. Prof. Sheaves made several suggestions to guide deliberations and technical discussions:-

- i Consider and reflect on the important questions that influence funding support for future R2R investments, imperatives that would influence outcomes, and published science emerging from R2R;
- ii Against the backdrop of remaining 10+ months and financial resources of the IW R2R project it’s important to have a balanced view of science, social science, and traditional ecological knowledge, and also the dynamics in society from community and cabinet;
- iii Consider options to accelerate implementation that adds value to the decision that policy makers are going to make, in the remaining timeframe, and beyond; and
- iv Determine how to give best efforts to make sure that we are achieving values for sustainable development of the region?

Provisional Agenda

9. The Facilitator invited comments on the provisional agenda noting there may be changes on the presentation of papers, which include late papers and presentations. A copy of the agenda is appended as Attachment 2.

10. The consultation considered and **endorsed** the provisional agenda noting changes to the order of presenting papers.

Session 1: Overview

Topic 1 - Where are we in R2R?

11. The Programme Coordinator introduced WP.01, which outlines brief updates on progress delivering on project components and outcomes. Currently the national demonstrations are at different levels of implementation, thereby impacting on achieving targets. The role of RSTC in its TOR clearly provides the opportunity assist progress R2R projects through technical advice and active engagement. The paper provides several options to progress implementation and most importantly future directions beyond the current life of the IW R2R project.

12. The Participants discussed the guiding questions on:-
- i. Consider and reflect on key points on where we are in R2R in order to understand progress of implementation of the project; and
 - ii. Discuss and advice on the option to progress implementation and the role of the RSTC moving things forward.
13. The discussion that ensued was organized in groups in order to encourage effective participation and contributions from all participants. Below are some of the points and observations emerged from discussion?
- i. Increase support for science- and evidence-based approach supporting policy discussion and decision making, and **mainstreaming R2R at all levels of society and cross-sectorally.**
 - ii. Recognise limited time available to implement projects therefore **encourage some level of prioritization of implementing only priority project outputs and activities.**
 - iii. No proper records of what is happening with no proper systematic way of understanding what is happening in the system.
 - iv. Need to **centralise data and made it easily accessible.**
 - v. Capacity building is important in terms of Science in the Pacific. From an economist's perspective, capacity building is important because it supports the actual implementation of project at national level.
 - vi. Need for a holistic approach, covering research results and resource GIS maps, to scale up projects by extrapolating the data on site level, **scale it up to national level and then demonstrate changes to be able to drive national policy change.**
 - vii. Maintain a balanced view of **not just science or the social science, but also the dynamics in society from community and cabinet** and find a way in which we can accelerate implementation that adds value to the decisions that policy makers are going to make.

14. The stakeholder consultation **recommended** the need for baseline data to be systematically collected and analysed to help gain an understanding of what is happening as a result of mainstreaming R2R. The consultation also **recommended** that dataset needs to be made available and accessible to enable analysis and modelling thereby supporting adoption of policy choices and decision making that conforms to the principles of R2R.

Session 2 – National R2R Demonstrations

Topic 2 – Lessons & Experiences

- i. **Towards a guide to developing lessons learned and best practice documents for Pacific R2R Programme**

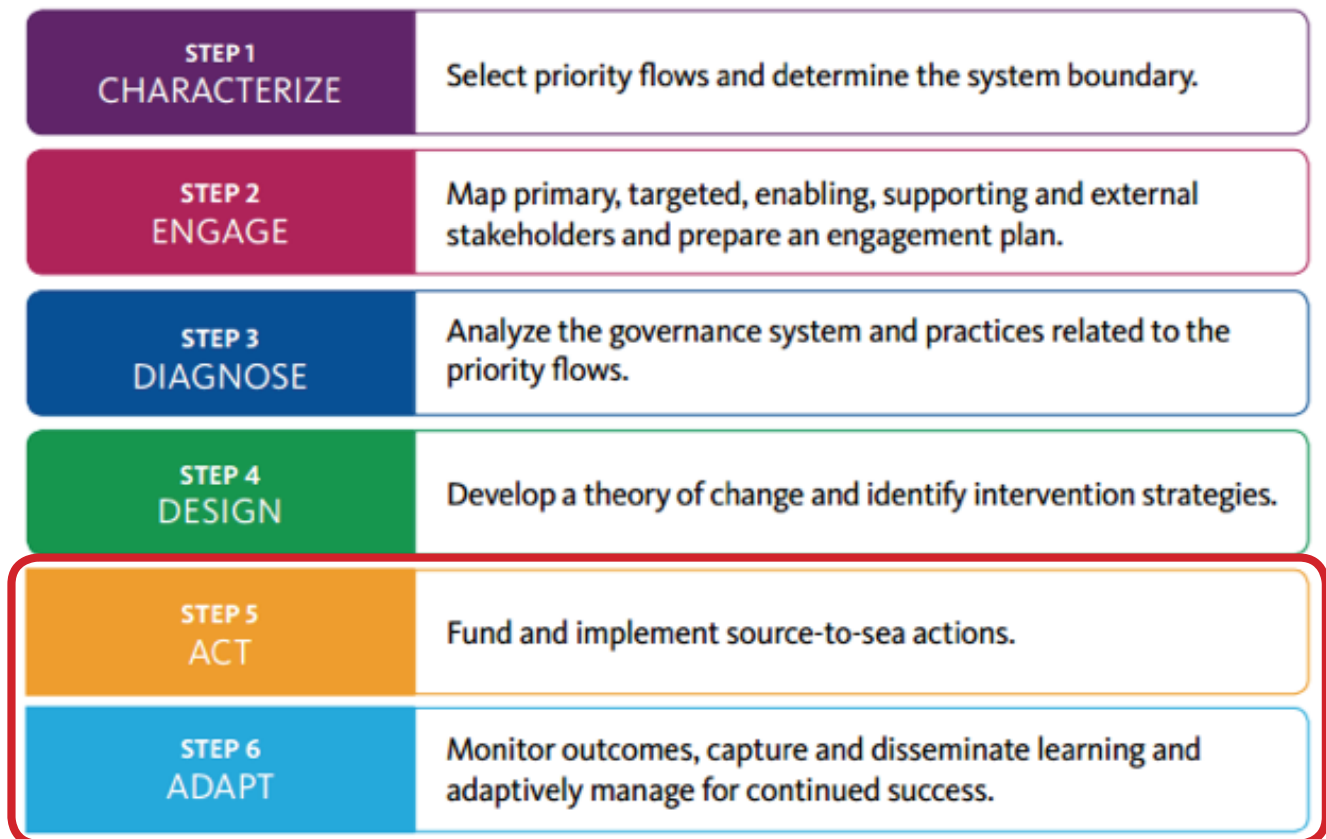
15. The SPC staff, Communications and Knowledge Management Advisor Dr. Fononga Vainga Mangisi-Mafileo introduced WP.17 discussing the progress towards developing a Guide for the development of lessons learned for the Pacific R2R Programme. The paper provided an overview of the MTR recommendation 11 on lessons learned, and the governing document endorsed by the Fifth Regional Science and Technical Committee and Fourth Regional Steering



Dr. Fononga Vainga Mangisi-Mafileo
Pacific Community (SPC)

Committee (Nadi, 2019) *Proposed Pacific regional R2R programmatic framework for lessons learned (endorsed by RSTC5 and RSC4 – 2019)*.

16. Dr Mangisi-Mafile'o provided an overview of the R2R Management Approach, and a guide to implementation, highlighting steps 5 and 6 as where lessons will be derived while also considering the implication on Steps 1 – 4 for future investments.



17. Dr. Mangisi-Mafile'o explained that the guide considers two key analytical frameworks: (i) Innovation-Decision Making Process (Rogers, E. 2003); and (ii) Success Factors for Effective Cooperation (GIZ GmbH, 2015). Along with the Guide, the author(s) will have access to existing supplementary documents, among them:

- National programme framework documents
- Project Progress Reports
- Annual Reports

18. The RSTC participants were invited to discuss and provide advice on any other useful considerations for the development and compilation of lessons learned for the Pacific R2R Programme. The highlights of the discussion are as follows:

- The importance of understanding the objective of documenting and disseminating lessons, the targeted audience, and the best tools and methods to create awareness, knowledge and a sustained shift in behaviour;
- One participant stated that Scientists are not necessary the best marketers, and that the selling (communication, education, public awareness and advocacy) should be left to those with that expertise;
- Social scientific inquiry is critical to understanding the decision-making process; policy and decision makers often find options that provide significant contributions to improving economies of scale and improving livelihoods more useful;

- Traditional Ecological Knowledge is an important consideration for mainstreaming R2R in to governance arrangements, and lessons on how this can be improved will be useful;
- The identification and recognition of community champions to get the message across to community members was an effective lesson learned in demonstration sites;
- Consider factors contributing to success and failure in demonstration sites, and assessing the feasibility of the project design;
- Scientists need management training, and managers need a working understanding of science to apply it effectively.

ii. Project timelines for the Regional IW R2R Project

19. SPC staff Mr. Jose Antonio introduced the Project timelines for the Regional IW R2R Project and stressed the importance of countries submitting their evaluation report on time so that it can be finalized and compiled before the official end date. Participants also expressed concerns on the limited time and resources remaining to deliver on targets. A copy of the Project timeline is appended as **Attachment 3**.



Mr Jose Antonio- Pacific Community (SPC)

iii. Institute of Applied Science-USP research papers funded by Fiji STAR R2R Project

20. There were four papers introduced under this session from the Institute of Applied Science of the USP, which were specific to national demonstrations. The research papers focused mainly on several research topics funded by the Fiji STAR R2R project primarily on biodiversity conservation. A brief and short summary of the papers are given below:-

i. The USP South Pacific Regional Herbarium staff (Marika) introduced WP.05 which looks at the conservation and sustainable use of the biodiversity. The paper investigates the function of biodiversity and the health of ecosystems in the Pacific Islands with the main focus on watershed services in relation to the various lowland ecosystem. The study enables the team to develop a map highlighting 'potential' and current protected areas in Fiji and in surrounding PIC's.



Marika Tuiwawa - USP

ii. Mr Alivereti Naikatini introduced WP.04 which is an inventory of the baseline of the biodiversity of the existing upper Tuva catchment. The paper is also focused on fine-tuning the methodology used to make it easier and shorter to carry out the survey while ensuring data collected is of high quality.



Alivereti Naikatini - USP

iii. Ms Bindiya Rashni introduced WP.07 a baseline survey of the freshwater invertebrates and ecological status of the Ba River Fiji. The paper also looks at simplifying the freshwater biota assessment methods to local application.



Bindiya Rashni- USP

iv. Mr Andrew Paris introduced WP.06 a baseline assessment of Sharks and Rays in the Votua qoliqoli Ba. In studying the distribution pattern and abundance of sharks and rays the paper aims to establish a conservation area for the two species along the Ba estuary.



Andrew Paris - USP

21. The following points provide summary of discussion on the four IAS-USP papers:-

- i. The conclusions drawn in the researches appear too strong and premature because the research findings do not necessary provide compelling evidence for closing off certain areas of land and sea for biodiversity conservation relative to the consideration of replicating the research and methods in other candidate areas to enable spatio-temporal comparison of results.
- ii. Strong support to filter these researches through peer review groups set up at the national level to review the methods to acceptable quality standards. Similarly, or even better, support for publication of the methods and research work in journals for better chance of being scientifically robust and acceptable to replicate and generate quality data to inform policy discussions and decisions.
- iii. Consider using technical nationals in-countries who have retired however can still offer technical expertise to get the working on up-scaling or twinning future R2R investments and ICM planning nationally that uses similar methods or best practices.
- iv. Support for pool of experts established to assist with compilation of data. It is important to consider the appropriate method used is university acceptable datasets collected reliably analysed and conclusions used to inform policy change to effect reforms and good governance.
- v. While all the assessments are carried out to collect baseline data, planning and design development measures and intervention in R2R, it is not immediately clear what is being done to continue the monitoring process and better see how effective the development measures are? Support for ongoing monitoring of key indicators are important candidates for post R2R programme to measure and detect real impacts of R2R interventions.
- vi. Ensure the methods used are easy to adopt, easily transferrable and replicated elsewhere in assessing similar ecosystems and drawing the same type of information. This would allow tempo-spatial comparisons of certain proxies and indicators to inform policy decisions.
- vii. Data can be coupled with species distribution model that can allow for geographical extrapolation of data points to areas that have yet to be surveyed therefore potentially can be taken from a watershed to island scale if the data is available.

22. The stakeholder consultation provided the following advice and recommendations:-

- i. That more scientific research is carried out across the Pacific Islands paying close attention to quality of science (with the acceptable levels of replication) and accurate use of research findings to effect policy change and good governance in natural resources management;
- ii. That access to data should be easily made available since most of the data acquired is not accessible in the public domain;
- iii. That capacity building at all levels and across sectors must continue to be a key principle in future R2R investments and ICM planning; and
- iv. That the shark case study is a good candidate for replication in other watershed catchments in Fiji, and the results useful reference for influencing and challenging R2R application in the Pacific.

Session 3: Regional-led Outputs & Activities

Topic 1 – R2R Conceptual Framework on Spatial Prioritization Procedures

i. Informing spatial prioritization using R2R conceptual framework in tropical island setting

23. Dr Jade Delevaux introduced WP.08 which provides update on the development of the spatial prioritization using R2R conceptual framework in a tropical island setting. The trials of the modelling procedures carried out in Vanuatu last year and, will be replicated soon this year in the Solomon Islands. The paper focuses on developing and applying the procedures at two levels, national scale and local watershed scale. The trials uses the IW R2R demonstration site for the local watershed scale application.



Jade Delevaux - Consultant

24. Participants noted the following key steps in the R2R spatial prioritization procedures.

- i. Areas that were vulnerable to potential sediment runoff were identified.
- ii. Identification of watersheds that were linked to the areas that was vulnerable to runoff.
- iii. Within those watersheds, which areas were most prone to erosion that can be prioritized for conservation given that deforestation is one of the main drivers of sediment runoff in Vanuatu.

25. The propose prioritization procedures address future work in the identification and selection of priority coastal areas and sites suitable for biodiversity conservation. The procedures support science- and evidence-based approaches and help Pacific communities in future R2R investments upscaling and integrated coastal management (ICM) and planning.

26. The following points emerged from the discussion that follows the presentation.

- i. An important issue raised relates to the inability to access research work for purposes of comparing results. The research and funding institutions are specifically making it mandatory that all research work must be published and information shared and available publicly at least after two years of completion. This would enable researchers and those in the scientific community able to access the information for comparison and embarking on further analyses in response to certain research questions.
- ii. Recognising the risks associated with modelling and models, it would be important carry out future work on sensitivity analyses using different sets of scenarios, and whether or not the results necessary change the conclusions of the priority sites selected using the prioritization model. The sensitivity analyses were done and the results did not alter the conclusions of the model outputs.
- iii. Land-sea modelling identifies certain areas as key spots in which could potentially considered for protection or work to control land use activities, which in turn, help control sediment export impacting biodiversity and habitat down streams or adjacent coastal/ marine areas.
- iv. The prioritisation model does not estimate period of recovery or rehabilitation or restoration from an R2R intervention or impact assessment. Notably, certain species of land and sea creatures respond differently to impacts from range of sources, sediment, silt, waste, chemical/ oil spills, radioactive materials, rubbish etc.
- v. Participants noted that it takes up to 10-years for some fish species to restore populations to original virgin size or healthy habitats in response to an MPA. It is important to

consider what species selection to use based on how long the fish will take to establish themselves to that environment.

- vi. The importance of looking at the context of land use change in forestry due to deforestation as a driver of sedimentation and climate change impact, especially within the context of vying for REDD+ accreditation. The whole modelling is based on the deforestation and logging as primary cause of sediment export down-stream. Other major land-use environmental threat not necessary the same as deforestation can also be modelled separately to establish impacts on the health of habitats and resources down-stream and coastal/ marine areas adjacent to the mouth of the river.

27. The stakeholder consultation:-

- i. Underscored the importance and relevance of this work due to the data which can foster collaborative management and dialogue between people of different agencies and communities and across different geo-political boundaries.
- ii. Recommended that trial work continues to the Solomon Islands and that the methods and results need to be peer reviewed and published as basis to reliably be used to develop regional guidelines for implementing R2R spatial prioritization procedures.
- iii. Highlighted the importance of having a good understanding of sampling design and how it can be used in different situations.
- iv. Recognise the limitations of the land-sea modelling are only as good as the quality of data collected and fed into the model, which is suitable for large and high PICs. The procedures may not be necessary the best choice to identify and selecting priority sites in atoll countries for R2R investments and ICM planning.

ii. Regional Guidelines for Implementing the R2R Spatial Prioritization Procedures for Identifying and Selecting Priority Coastal Areas in Future R2R Investments & ICM Planning

28. The SPC staff & Facilitator Sam introduced WP. 09, which is a working draft regional guidelines for implementing R2R Spatial Prioritization Procedures. The paper builds on current modelling work to develop and trial the prioritization procedures with details set out in the above agenda item. As additional tool in the “tool-box”, the proposed regional guidelines are intended for stakeholders and resource managers in PICs to use and apply in upscaling future R2R investments and ICM planning.

29. The paper sought discussion on two questions:-

- i. Consider and discuss the working draft, reflecting on clarity, relevance and practical application of the guidelines in the context of PICTs; and
- ii. Provide advice and recommendations, where appropriate, improving the draft guidelines.

30. There was no discussion noting the working draft continues to be improved with more results of trial work of the prioritization modelling in Vanuatu and Solomon Islands.

Session 3: Regional-led Outputs & Activities

Topic 2 – Pacific R2R Information Management Systems & Report

i. Developing a multi-purpose catchment database: From Project to Product

31. A member of the RSTC Mr Conway introduced WP.12, which focuses on developing a multi-purpose catchment database. He explained that in order to determine the standard of data and which metadata to use, it is important to know the countries and regions where data is readily available. The problem is that there is no existing database on all watershed catchments in the Pacific region. That said, a regional database is currently being developed to store all R2R data including catchment data.



Conway Pene - Consultant

32. The R2R baseline data provides an opportunity if recognised, trusted and accessible, to develop a range of products that can be traded and marketed for financial gains. For instance, the spatial prioritization procedures and modelling provides land-sea connectivity datasets to identify and select priority coastal areas to protect. The outcomes of the spatial prioritization work can be further developed as separate stand-alone products, which can be marketed or traded.

33. Moreover, participants noted the importance of defining clear project targets by countries and regions with catchments in order to develop a multi-purpose catchment database. There was support for the accessibility of data at some form and data needs to be re-usable, have the right attribution, aligned with a data standard and published via an authoritative agency. Equally, it was considered prudent setting standards in terms of the type of metadata to use, evaluation of resource allocation, decide whether if raw topographic data is needed, and implementation through generation of catchments, promotion of the product and usage of monitoring framework.

34. The standard of data will be determined and responsible authorities should be able to identify which metadata to use. It was also considered important that more digital data needs to be captured through plans that are properly developed to allow this to occur and that catchment data can be generated to transform project to product.

Participants recommended exploring further the concept of project to products particular post-R2R, such as build in as next stage in the prioritization modelling work, the required products that can developed and traded.

ii. State of Coastal Platform: Spatial Data Infrastructure for the GEF R2R programme

35. The SPC staff, Mr Sachin Singh introduced WP 10, which provides the updates on developing the regional database for the R2R programme. This is also called the State of Coastal Platform, Spatial Data Infrastructure for the GEF R2R programme. Spatial data infrastructure is often used to denote relevant base collection of technologies policies and institutional arrangements. The key features in the database or platform is about data sharing between users, group and public.



Mr Sachindra Singh- Pacific Community (SPC)

36. The R2R spatial data infrastructure is all open source and systems can be deployed into any of the national projects with zero licence needed, thereby making it cost-effective. The platform is user-friendly for non-technical people and allows multiple users updating one map without the restriction of expensive GIS software or powerful computers. Also, the data can be constantly updated.

37. Participants noted progress of developing the regional database for the R2R programme in accordance to its workplan. It is expected to complete work on the regional database by end of February 2020. The Data Support Interns have been recruited to commence work populating the database with all R2R datasets.

The Participants also recommended the database is populated with all the necessary R2R datasets as soon as possible to enable extraction of data for analyses. The regional database is expected to be launched along with the re-development of the R2R website at the upcoming formal session of the RSTC and RSC.

iii. Update on the Pacific R2R Website Re-development Design

38. The SPC staff, Communications and Knowledge Management Advisor Dr. Fononga Vainga Mangisi-Mafile'o introduced WP. 11 presenting an update on the implementation schedule and overview of enhancements to the existing system within the context and implementation of the communications and knowledge management strategies based on the needs outline in the R2R programme and project documents. The Committee was appraised on the progress to date - phase 1 currently in implementation, including information architecture and graphic design. Phase 1 will be launched on World Water Day March 22. Phase 2 of the redevelopment work includes the project management information system (PMIS), which plans to be launched in August at the Fifth Regional Steering Committee.

39. Participants noted progress of re-development design in the Pacific R2R website, particularly with respect to the delivery of the following systems/ services:-

- i. Upgrade of the pacific-r2r.org website
- ii. Provision of online discussion forum platform
- iii. Development of a custom Project Management Information System (PMIS)
- iv. Training and documentation for the above online tools
- v. Managed cloud hosting of the above online tools

Session 3: Regional-led Outputs & Activities

Topic 3 - Environmental Baseline Assessments

40. Dr Isoa Korovulavula introduced WP. 13 focusing on key R2R biophysical areas of assessment, namely: habitats & natural resources; water quality and, hydrology and oceanography. The fundamental importance of environmental baseline assessments is directly linked to the detrimental effects of disease that affects human health and wellbeing (with minimal diseases) of Pacific societies in the Pacific. A healthy environment literally translates well to healthy societies.



Dr Isoa Korovulavula- IAS-USP

41. Participants considered important that resources and priority be considered to support environmental assessments and mitigate such environmental threats, if any emerging from such assessments and analyses. It was suggested as an option to develop a decision making process that takes into consideration formulation of appropriate multi criteria approach. For instance, certain frameworks such as environmental impact assessment (EIA), environmental impact statement (EIS), SEA (Strategic Environmental Assessment) or SESA (Strategic Environmental and

Social Assessment) or similar assessment techniques on policy formulation and/or reform, which are largely designed to deliver on targeted objectives.

42. A move towards a strategic decision-making framework delegated at the programmatic level (SEA) instead of a more project specific/project focused approach (EIA) was recommended to be a promising direction. The EIA approach, while highly beneficial, only aims to obtain information on the mitigating and the impact of the development measure and interventions. The SEA approach, however, was more proactive in terms of looking at the strategic long-term perspective of current programmes when looking at the related plans and actions. For example: the SEA approach looks at the development plan of an island instead of focusing on a very specific project on the island.

43. The stakeholder consultation supported the need for improved understanding in developing and testing sampling design, and with the necessary experimental controls. The sampling protocols must be robust, support collection of reliable relevant baseline data and delivers adequately on the primary objectives/ questions for monitoring purposes. It was also suggested to develop a decision making process that takes into consideration formulation of appropriate multi-criteria approach. This includes review of current EIA framework using the various datasets gathered by the R2R process.

Session 3: Regional-led Outputs & Activities

Topic 4 - Determination of nutrients offload

44. Dr Isoa Korovulavula introduced WP. 14 which focused on encouraging research tailored to specific question like determining of nutrients offload from animals solid wastes and urine. At this time, there no standards on nutrient offload for Pacific Island countries. Rather, standards based on research work done in Europe, USA and other developed countries are used in a formula to estimate stress reduction targets for project countries. This includes estimating current (baseline) levels of pollution in water contaminated with human and animal wastes, and monitors these levels into the future with R2R interventions.
45. Participants underscored the importance of understanding land-use activities in the surrounding environment of sampling sites before conducting water quality assessments. For example, QGIS is used to estimate municipal wastewater loads (these wastes may be solid but due to rain, it seeps into relevant and important underground water sources. This is crucial to explain the trends in the environmental data. For instance, it is important to establish an understanding on waste treatment facilities and infrastructure plus waste management policies and legislations to fully comprehend possible causal links if any between such land-use activities or related facilities and water quality results.
46. Monitoring of conventional water quality parameters such as presence of pesticides, nutrients (mainly ammonia), nitrates, nitrites and phosphates must be done long term. Similarly, it is also important to carry out research and understand implications of micro-plastics, artificial and chemical in animal feeds. Accordingly, research found feeds for chicken and pigs contain antibiotics which make bacteria immune and stronger thus making it hard to destroy them. This practice not only impact on the animals but also indirectly posing health risk to communities with untreated water source.
47. It is important to support research in these areas to better manage and control such risks and most importantly the use of research findings to support policy change addressing environmental threats. More broadly, support for opportunities to explore and identify research topics relevant to determining nutrient offloads. There are range of research topics possibly at Masters and PhD levels that can be explored to determine nutrient offloads. Participants also noted that baseline

data is important and pre- and post-testing is also crucial. In some cases an experimental control must be in place for a more robust experimental design for water quality sampling.

48. Participants noted that the above points are consistent with decision supporting future studies focusing on estimating nutrient concentrations and bio-chemical oxygen demand (BOD) of human and animal faeces and urine, and the efficacy of different waste treatment systems. Equally, the discussion respond favourably to the RSTC recommendation for future research to improve estimated loads for waste pollution with more applied research on nutrient contents of human and animal wastes closer to point source of pollution in tropical areas of the Pacific region.

49. The stakeholder consultation underscored the importance of supporting research that establish regional standards on human and animal wastes, which could be reliably used in the calculation of pollution levels and stress reduction targets for project countries. The Pacific region does not have such standards and the calculations of stress reductions targets in R2R countries use standards established in other parts of the world. This is a problem that can be addressed by encouraging research on relevant topics on nutrient offloads.

50. Support to identify research topics for uptake by students in the Masters and PhD levels.

Session 3: Regional-led Outputs & Activities

Topic 6 – Capacity Building & Strengthening, Ecosystem Goods and Service (EGS) Valuation

51. Dr Salome Taufa introduced WP.16 which focuses on the importance of EGS to influence high level decision making and ICM planning. Certain people understands market values of an ecosystem goods and services better than the dynamic complex relationships that exists and support existence of biological diversity in plants and animals. The valuation depends on how people use it (resource) and how it is important to the people – the rich biological diversity in flora and fauna and systems can be evaluated for their monetary value including traditional goods.



Dr Salome Taufa - PIFS

52. The application of EGS as a tool is already in the region and there are many EGS valuation reports available for several PICs. For example: EGS for the Pacific was run by MACBIO (Marine and Coastal Biodiversity Management in Pacific Island Countries) through IUCN (International Union for Conservation of Nature) a few years ago. There is expertise in the region and the valuation reports have been used successfully to review or develop high level policies and legislations in PICs. The R2R project can use current processes in EGS as entry points to undertake similar valuation work in demonstration sites.
53. Dr Taufa made a point from the discussion in the last RSTC meeting with respect to whether to use the EGS framework or the DPSIR (drivers, pressures, state, impact and response model of intervention) framework. It was further elaborated that perhaps bringing in EGS at this point does not mean new data can be collected, but looking at a strategy that can provide beneficial outcomes within the next 10 months.
54. The valuation of Ecosystem Goods and Services means factoring in what this means as far as the communities' perspective is concerned. What may be perceived as beneficial in the short term, may have economically positive benefits in 50 years time. For example, conservation of forests near a community is more beneficial in the long run compared to the short term economic benefits of logging and deforestation – a known driver of sediment runoff.

55. EGS means putting a value on something people are going to use. If the value is not correct, the consequences could be disastrous. It all goes back to robust, highly reliable, expertly designed sampling regimes which result in the collection of good baseline data. The value in EGS is only as good as the data in it.

56. Key questions for discussion

- i. Can EGS valuation be integrated into existing projects to achieve something in the next 10 months if it hasn't been done yet?
- ii. If we set a very low bar we can do it in a matter of time. The higher the bar the longer it takes. The question is how high is the bar?
- iii. Is the capacity to carry out such valuation exercise available? If not, should this be included in the existing JCU training?
- iv. How can the experience in this room support the recommendation 5 of the MTR to produce an outcome?

57. The stakeholder consultation:-

- i. Supported the possibility to incorporate these frameworks into the training programme for the managers done by JCU (James Cook University) as a positive outcome;
- ii. Supported capacity building opportunities offered through R2R funded initiatives such as EGS and Spatial prioritization work, to engage PIC students and researchers for experience and pursuing graduate programmes of Masters, PhDs and post-doctorate.
- iii. Encouraged strategic planning rolling out EGS trial work as appropriate in several project countries within the remaining period of the IW R2R project.

Session 4 – R2R Science-Policy Framework

Topic 1 – Updates and regional guidelines for implementing science-policy interface (Working Draft)

58. The working paper on the regional guidelines for implementing R2R science-policy interface was circulated in advance of the consultation. The SPC staff & Facilitator, Sam, briefly introduced the paper noting it is a working draft and given no time to present it, will be presented and considered at the next RSTC meeting. There was no discussion on this session.

Session 5 – Priority Actions as Future Tasks?

Topic 1 – What's Next? Future Plans?

Topic 2 – Series Outcomes

59. At the start of the consultation, participants reflected on where we are in progress of implementing the R2R programme, and discuss strategic means to progress further in the remaining 10+ months. In the same vein, participants also discussed future prospects with respect to post-R2R and, whether or not there is a future for R2R. Below are some of the points that emerged from the discussion:-

- i. R2R is not new and biodiversity conservation has been a long practice of the past. Each Pacific Island Countries has its own way of connecting/interacting with the ecosystems through conventional/ traditional best management practices. This is one area worth considering in future upscaling R2R investments and ICM planning.

- ii. Encourage participation of the right and important people mainly those in leadership positions, who are seen not being targeted. There is technical expertise in this region some of whom have contributed and supported R2R implementation. However, the contributions and engagement of people in influential and leadership positions like CEOs of government ministries and civil societies appear lacking and therefore often contributed to delays and failure to deliver on targets within timelines. These are the people that can inform and convince PIC's governments on what we do.
- iii. Support for science and social science and traditional knowledge in the next phase of R2R, and increase countries allocations and increase project staffs in-countries. The communities are encouraged to be engaged from the start to the end and experts in governments and civil societies targeted and involved.
- iv. Support for community engagement at level of society and project implementation for good chance of 'buy in' and successfully achieving project objectives and milestone targets. This is linked to traditional ecological and archaeological knowledge, which are becoming priority considerations in community resource management.
- v. Support for spatial planning and food security as priority areas for progressing implementation and future upscaling R2R investments and ICM planning. These areas appear lacking in-countries but useful to inform national infrastructure development and food security. The results of resource assessments and inventories can help inform this process in the next phase of R2R investments and ICM planning.
- vi. Support for more technical consultation but with wider participation pool and government agencies. There are important natural resource sectors (agriculture, forestry, fisheries, and mining) that need to be involved in future technical consultations. In most PICs, the agriculture departments of governments deploy their officers in rural and remote communities, and they might have a few inputs of what is happening

60. Participants underscored the value of these kind technical consultations which allowed frank exchanges and show casing research work in demonstration sites, and how these efforts contribute to delivering on R2R targets and commitments sub-nationally, nationally, regionally and globally. Participants recommended that:-

- i. Technical consultations of the RSTC continue into the future however allow more time and wider participation of key people in government and local communities. The topics and researches to consider include other natural resource sectors in land and sea. The lessons learned from resource surveys in the past plus people directly involved are important in future engagements in the work of RSTC.
- ii. The participation of regional and national institutions is encouraged, which includes the establishment of a pool of researchers.
- iii. The next 2nd series is considered either in the margin of the next annual sessions of the RSTC/ RSC, or defer to later this year.
- iv. Streamline topics to be covered to allow ample time to engage in discussion than presentation of papers.
- v. Consider and allocate adequate resources to support future series of consultations.
- vi. Promote more technical and scientific discussions on the quality of science emerging from R2R programme, with opportunity to engage in peer reviewing materials for publications
- vii. Support developing a concept to the RSC relative to the future of IW R2R project and outlining key focus areas including EGS, capacity building (e.g. JCU R2R teaching course), monitoring key indicators, etc.

61. The Regional Coordinator offered closing remarks thanking everyone for their contributions and inputs into the 2-days of technical discussions.
62. The RSTC Chair Prof. Marcus Sheaves will prepare his report on these outcomes for presentation at the next formal session of the RSTC in August 2020.
63. The consultation closed at 12pm on the 7th February 2020.

ATTACHMENT 1: LIST OF PARTICIPANTS

Title	First Name	Last Name	Affiliation	Organisation	Country	Funding Support
Ms	Silia	Leger	IW R2R Project, Project Manager	R2R Project Country	Tonga	National R2R or govt
Mr	Pesega	Lifuka	IW R2R Project, Project Coordinator	R2R Project Country	Tuvalu	National R2R or govt
Mr	Walter	Pulogo	IW R2R Project, Supervisor	R2R Project Country	Tuvalu	National R2R or govt
Ms	Ivy	Latasi	STAR R2R Project, Project Coordinator	R2R Project Country	Tuvalu	National R2R or govt
Mr	Noa	Vakacegu	STAR R2R Project, Project Staff	R2R Project Country	Fiji	National R2R or govt
Ms	Amelia	Raratabu	UNDP-Suva, RMI STAR R2R project staff	R2R Project Country	RMI	UNDP
Mr	Aliveret	Naikatini	Institute of Applied Science	USP	Fiji	UNDP
Ms	Rashni	Bindiya	Institute of Applied Science	USP	Fiji	UNDP
Mr	Marica	Tuiwawa	Institute of Applied Science	USP	Fiji	UNDP
Mr	Andrew	Paris	Institute of Applied Science	USP	Fiji	UNDP
Prof.	Marcus	Sheaves	JCU, RSTC Chair	RSTC	Australia	Regional R2R
Dr	Isoa	Korovulavula	IAS-USP/ RSTC Co- Chair	RSTC	Fiji	Regional R2R
Dr	Salome	Taufa	PIFS, RSTC member	RSTC	Fiji	Regional R2R
Mr	Pene	Conway	Consultant, RSTC member	RSTC	Australia	Regional R2R
Mr	Floyd	Robinson	UNDP-Suva, RSTC member	RSTC	Fiji	UNDP
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Mr	Sachin	Singh	GEM-SPC	SPC	Fiji	Regional R2R

ATTACHMENT 2: MEETING AGENDA

Wednesday 5th February 2020, 1.30pm – 5pm

Opening & Prayer

Opening/ Introductory Remarks

Agenda adoption & House-keeping

Session 1 – Overview

Topic 1: Where are we in R2R?

Thursday 6th February 2020, 9am – 5pm

Session 2 – National R2R Demonstrations

Topic 1 – R2R Management Approaches

Topic 2 – Lessons & Experiences

Session 3 – Regional-led Outputs & Activities

Topic 1 – R2R Conceptual Framework on Spatial Prioritization Procedures

Topic 2 – Pacific R2R Information Management Systems & Report

Topic 3 – Environment Baseline Assessments

Topic 4 – Determination of nutrient offloads

Topic 5 – Municipal Waste Pollution Reduction

Topic 6 – Capacity Building & Strengthening, Ecosystem Goods & Services Approach & Evaluation

Topic 7 – Communication & Outreach programmes

Session 4 – R2R Science-Policy Framework

Topic 1 – Updates and regional guidelines for implementing science-policy interface (Working Draft)

Friday 7th February 2020, 9am – 12pm

Session 5 – Priority Actions as Future Tasks?

Topic 1 – What's Next? Future Plans?

Topic 2 – Series Outcomes

Closing

ATTACHMENT 3: PROJECT TIMELINE FOR THE REGIONAL IW R2R PROJECT.

Regional IW R2R Project Timelines																						
Dates to Remember	2020												2021									Notes
	Jan	Feb	Mar	April	May	June	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	April	May	Jun	Jul	Aug	Sep	
Last day of implementation of national IW R2R projects															X							3-months before the official end date (LoV)
Terminal Reports of national IW R2R projects from PICs due		1				1			1			6			1			4 x				All national demo end by Jun 2021
Facts and figures on the national demonstration (GEF IW tracking tool), co-financing, process indicators, etc.												X										
Independent Terminal Evaluation by UNDP													X	X	X							
Terminal Report Preparation																			X	X		
Terminal Report available																					X	Handed over by RPCU to SPC for submission to UNDP
Project end date																					X	