Executing Agency:
United Nations Development Programme

Implementing Partner:
Office of Environment and Emergency Management (DECEM)

Terminal Evaluation of UNDP-GEF Project: *"Implementing an integrated 'Ridge to Reef' approach to enhance ecosystem services, to conserve globally important biodiversity and to sustain local livelihoods in the Federated States of Micronesia" (FSM R2R)*

(UNDP PIMS ID: 5179, GEF Project ID: 5517)

Final Report

Mission Members:
Mr. Roland Wong, International Evaluator

December 2022

SYNOPSIS

Title of UNDP-GEF project: Implementing an integrated "Ridge to Reef" approach to enhance ecosystem services, to conserve globally important biodiversity and to sustain local livelihoods in the Federated States of Micronesia (FSM R2R)

UNDP Project ID: PIMS 5179

GEF ID: 5517

Evaluation time frame: 19 November 2015 to 31 October 2022

Project implementation start date: 19 November 2015

Project end date: 19 November 2022

Date of evaluation report: 31 December 2022

Region and Countries included in the project: Federated States of Micronesia

Implementing partner: Department of Environment, Climate Change and Emergency Management (DECEM)

Evaluation team members: Mr. Roland Wong, International Evaluator

Acknowledgements:
The Evaluator wish to acknowledge with gratitude the time and effort expended by all project participants and stakeholders during the course of the FSM R2R Project Terminal Evaluation. In particular, gratitude is extended to the FSM R2R Team based in Palikir and Yap, and UNDP staff in Fiji. The Evaluator sincerely appreciate the interactions with all of you, and sincerely hope that this report contributes towards a more sustainable future for FSM.

ABBREVIATIONS

Acronym	Meaning
BD	Biodiversity
CBD	Convention on Biological Diversity
CC	Climate Change
CDRs	Combined Delivery Reports
CO	UNDP Country Office
CSO	Civil Service Organization
CTA	Chief Technical Advisor
CWC	Chuuk Women's Council
DECEM	Department of Environment, Climate Change and Emergency Management
DIM	Direct Implementation Modality
DLP	Dry litter piggery
EEZ	Exclusive Economic Zone
EoP	End of Project
EPA	Environmental Protection Agency
ESC	Yap Environmental Stewardship Consortium
EU	European Union
FAO	Food and Agricultural Organization
FSM	Federated States of Micronesia
FSP	Forest Stewardship Plans
FSM-R2R	UNDP-GEF Project: Implementing an integrated "Ridge to Reef" approach to enhance ecosystem services, to conserve globally important biodiversity and to sustain local livelihoods in the Federated States of Micronesia
GEF	Global Environment Facility
GoFSM	Government of the Federated States of Micronesia
HACT	Harmonized Approach to Cash Transfers
HDI	Human Development Index
IAS	Invasive Alien Species
IEMPs	Integrated Environmental Management Plans
ILMPs	Integrated Landscape Management Plans
IWRM	Integrated Water Resources Management
JICA	Japan International Cooperation Agency
KCSO	Kosrae Conservation Safety Organization
KIRMA	Kosrae Island Resource Management Authority
KLUP	Kosrae Land Use Plan
LDN	Land Degradation Neutrality
LEAP	Local Early Action Plan
M&E	Monitoring and Evaluation
MC	Micronesia Challenge
MCT	Micronesia Conservation Trust
MDG	Millenium Development Goal
METT	GEF's Management Effectiveness Tracking Tool
MPA	Marine Protected Area
MRMD	Yap Marine Resources Management Division

Acronym	Meaning
MTR	Mid-Term Review
NGO	Non-governmental organization
NIM	National Implementation Modality
NTC	National Technical Coordinator
OEEM	Office of Environment and Emergency Management
OM	Operations Manual
PA	Protected Area
PAN	Protected Areas Network
PIF	Project Identification Form
PIMPAC	Pacific Islands Marine Protected Areas Community
PIU	Project Implementation Unit
PM	Project Manager
PMAT	Portfolio Monitoring and Tracking Tool
PRMC	Pohnpei Resource Management Committee
ProDoc	Project document
PSC	Project Steering Committee
RMC	Resource Management Committee
RPA	Responsible Party Agreement
SDG	Sustainable Development Goals
SEA	Strategic Environmental Assessment
SEM	Socio-Economic Monitoring
SESP	UNDP Social and Environmental Screening Procedure
SEWG	Chuuk State Environmental Working Group
SGP	UNDP-GEF's Small Grants Programme
SLM	Sustainable Land Management
SMART	Specific, Measurable, Achievable, Relevant and Time-bound
SOU	Sapo, Oror and Ununo
SPC	The Pacific Community
SPREP	Secretariat of Pacific Regional Environment Programme
SRF	Strategic Results Framework
TAC	Technical Advisory Committee
TE	Terminal Evaluation
TNC	The Nature Conservancy
ToC	Theory of Change
ToRs	Terms of Reference
UNCCD	United Nations Convention to Combat Desertification
UNDAF	United Nations Development Assistance Framework
UNDP	United Nations Development Programme
UNEG	United Nations Evaluation Group
UNFCCC	United Nations Framework Convention on Climate Change
USFS	United States Forest Service
YapCAP	Yap Community Action Program

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EXECUTIVE SUMMARY

E-1. This report summarizes the findings of the Terminal Evaluation (TE) conducted during the August-October 2022 period for the UNDP-GEF project: "*Implementing an integrated "Ridge to Reef" approach to enhance ecosystem services, to conserve globally important biodiversity and to sustain local livelihoods in the Federated States of Micronesia*" (hereby referred to as the FSM R2R Project or the Project). This TE was prepared as an evaluation, with lessons learned, conclusions and recommendations primarily focused on the current setup of the FSM R2R Project. This TE covers the implementation period of the Project from November 2015 to the present.

Project Summary Table

Project Details		Project Milestones	
Project Title	Implementing an integrated "Ridge to Reef" approach to enhance ecosystem services, to conserve globally important biodiversity and to sustain local livelihoods in the Federated States of Micronesia	PIF Approval Date:	12 August 2013
UNDP Project ID (PIMS #):	5179	CEO Endorsement Date (FSP) / Approval date (MSP):	4 May 2015
GEF Project ID:	5517	ProDoc Signature Date (Project start date):	19 November 2015
UNDP Atlas Business Un it, Award ID, Project ID:	FJI10 Award # 00076246 Project # 00087749	Date Project Manager hired:	August 29, 2016
Country/Countries:	Federated States of Micronesia (FSM)	Inception Workshop Date:	17-21 October 2016
Region:	PAC	MTR Review Completion Date:	July 2019
Focal Area:	Multi-Focal Area	Terminal Evaluation Completion date:	31 December 2022
GEF Operational Programme or Strategic Priorities/Objectives	BD-1: Improve Sustainability of Protected Area Systems LD-3: Reduce pressures on natural resources from competing land uses in the wider landscape IW-1: Catalyze multi-state cooperation to balance conflicting water uses in transboundary surface and groundwater basins while considering climatic variability and change	Planned Operational Closure Date:	19 November 2022
Trust Fund:	GEF		
Implementing Partner (GEF Executing Entity):	Department of Environment, Climate Change and Emergency Management (DECEM)		
NGOs/CBOs involvement:	n/a		
Private sector involvement:	n/a		
Geospatial coordinates of project sites:	Latitude: 7° 42' 56" N Longitude: 150° 55' 8" E		

Financial Information		
PDF/PPG	**At approval (US$ million)**	**At PPG/PDF completion (US$ million)**
GEF PDF/PPG grants for project preparation	**0.150**	-
Co-financing for project preparation	-	-
Project	**At CEO Endorsement (US$ million)**	**At TE (US$ million)**
[1] UNDP contribution:	**0.000**	**0**
[2] Government:	**11.386**	**15.510**
[3] Other multi-/bi-laterals:	-	**7.022**
[4] Private Sector:	-	-
[5] NGOs:	**6.500**	-
[6] Total co-financing [1 + 2 + 3 + 4 + 5]:	**17.886**	**22.532**
[7] Total GEF funding:	**4.690**	**4.201**
[8] Total Project Funding [6 + 7]	**22.576**	**26.733**

Project Description

E-2. The Federated States of Micronesia (FSM) comprise an independent and sovereign island-nation consisting of four States spread across the Western Pacific Ocean from west to east: Yap, Chuuk, Pohnpei and Kosrae. The 607 islands of FSM stretch longitudinally over 1 million mi^2 of the western Pacific Ocean and 1,200 miles wide, located between 6 and 10 degrees north of the equator. The combined land area the FSM (High Islands and Atolls) is approximately 728 km^2 over a vast 2,700,000 km^2 of an Exclusive Economic Zone (EEZ) in the Pacific Ocean. The population of 103,000 is distributed with 50% on Chuuk, 33% on Pohnpei, 10% in Yap and the rest in Kosrae with 11% of the population being disabled. FSM receives approximately $130 million annually guaranteed funds until 2023 under a Compact Agreement with the USA, invested in education, health, infrastructure, public sector capacity building, private sector development, and environmental management.

E-3. FSM's agriculture sector is a major part of the economy, most of which is subsistence agriculture with over 60% of FSM's population dependent on subsistence farming and fishing. Swine production constitutes the primary livestock industry with pigs playing an important part in local culture. Other sources of revenue come from sale of fishing licenses to foreign fleets operating in its EEZ, and an emerging tourism industry in some States. The USA has created a Trust Fund providing long-term financial sustainability of FSM after 2023.

E-4. There are threats in FSM from unsustainable resource use practices and overharvesting of resources leading to the spread of invasive alien species and greater impacts from climate change. In 2014, the Government of the Federated States of Micronesia (GoFSM) had requested UNDP assistance in designing and implementing a project. The result was a project entitled "Implementing an integrated 'Ridge to Reef' approach to enhance ecosystem services, to conserve globally important biodiversity and to sustain local livelihoods in the Federated States of Micronesia, otherwise referred to as the FSM R2R Project, FSM-R2R or the Project. The Project was designed to engineer a paradigm shift in the management of natural resources from ad hoc centric approaches to a holistic ridge to reef management approach, where whole island systems are managed to enhance ecosystem services, to conserve globally important biodiversity and to sustain local livelihoods.

E-5. The United Nations Development Pacific Strategy 2018-2022 identified "Climate Change, Disaster Resilience, and Environmental Protection" (under Outcome 1) as a priority where "by 2022, people and ecosystems in the Pacific are more resilient to the impacts of climate change, climate variability and disasters; and environmental protection is strengthened". This outcome was to be achieved on the FSM R2R Project through 2 outcomes:

- Outcome 1: Integrated ecosystems management and rehabilitation on the High Islands of the FSM to enhance Ridge to Reef to be achieved through delivery of the following outputs:
  - Output 1.1: Four Integrated Landscape Management Plans (ILMPs) are developed and implemented for the High Islands of the FSM;
  - Output 1.2: Institutions with sectoral responsibilities for the development and conservation of the High Islands, together with relevant CSOs and community partners, are capacitated for coordinated action at the wider landscapes on SLM;
  - Output 1.3: Additional finances for SLM investments (including PA management costs) secured and existing contributions to the environmental sector to support SLM practices aligned;
  - Output 1.4: Management and rehabilitation of critical ecosystems implemented to enhance functional connectivity, reduce erosion, improve water quantity and quality and reduce coastal flooding.
- Outcome 2: Management effectiveness enhanced within new and existing PAs on the High Islands of FSM as part of R2R approach (both marine and terrestrial) to be achieved through delivery of the following outputs:
  - Output 2.1: National and State-level Legal and Institutional Frameworks have been established to improve management effectiveness of PAs;
  - Output 2.2: The Protected Areas Network (PAN) of the High Islands has been expanded, and existing and new PAs of the FSM have been secured through a review and upgrading of legal protection status (gazetting of all PAs);
  - Output 2.3: Management authorities (state and community) of newly established PAs are equipped and capacitated in managing PAs;
  - Output 2.4: Effective site and cross-site level PA management practices promoted in new and existing PAs.

E-6. The Project promoted an integrated approach towards fostering sustainable land management and biodiversity conservation, seeking to balance environmental management with development needs. One of the activities was to set-up a multi-sector planning platform to balance competing environmental, social and economic objectives. This was being done to reduce conflicting land-uses and improve the sustainability of upland and mangrove forest and wetlands management to maintain the flow of vital ecosystem services and sustain the livelihoods of local communities. The Project was also designed to demonstrate sustainable land management practices, testing new management measures to reduce existing environmental stressors, enhance the FSM's capacities to effectively manage its protected areas estate, as well as increase the terrestrial and marine coverage of the Protected Area (PA) system on the High Islands.

Project Results

E-7. Actual outcomes of the FSM R2R Project are summarized in Table A in comparison with intended outcomes.

Table A: Comparison of Intended Project Outcomes from the Inception Report to Actual Outcomes

Intended Outcomes in Project Results Framework of August 2016 (see Appendix H)	Actual Outcomes as of June 2022
Objective: *To strengthen local, State and National capacities and actions to implement integrated ecosystem-based management through "ridge to reef" approach on the High Islands of the four States of the FSM*	**Actual achievement toward objective**: Local, State and National capacities and actions were strengthened to implement integrated ecosystem-based management through "ridge to reef" approach. A Pohnpei IEMP was finalized in 2020 catalyzing and completing SEA and IEMP activities in other states. Management effectiveness scores were all trending in a positive direction even though some did not reach their target (Para 92).
Intended Outcome 1: Integrated Ecosystems Management and Rehabilitation on the High Islands of the FSM to enhance Ridge to Reef Connectivity.	**Actual Outcome 1**: Integrated ecosystems management and rehabilitation has enhanced Ridge-to-Reef connectivity on the High Islands of the FSM through: • Integrated Environmental Management Plans (IEMP) and Forest Stewardship Plans being implemented in all states; • Revival of cross-sector working groups having completed for all 4 states; • Co-financing targets for annual Government and donor funding having been exceeded; • Targets for mangrove, wetland and upland forest rehabilitation being exceeded; and • Adoption of a dry litter piggery system in Kosrae, Pohnpei and Yap within targeted catchments resulting in water quality improvements (Table 7).
Intended Outcome 2: Management effectiveness enhanced within new and existing PAs on the High Islands of FSM as part of the R2R approach (both marine and terrestrial).	**Actual Outcome 2**: Management effectiveness has been enhanced within new and existing PAs (both marine and terrestrial) on the High Islands of FSM through: • Obtaining verified legal status for 31 PAs totaling 36,488 ha; • All 4 states having operational PA management support systems in place as detailed in the FSM PAN Operations Manual; • Monitoring increases in fish biomass whose targets were generally met with the caveats of fish monitoring being more suited to monitoring "occurrence" rather than "changes in biomass"; • Knowledge exchanges conducted via (i) lessons learned disseminated through State wide events and other regional platforms; and (ii) most significant change stories that were shared nationally and regionally (Table 8).

Summary of Conclusions, Recommendations and Lessons

E-8. Despite all the difficulties in mobilizing the Project and its resources, the FSM-R2R Project has in 2022 strengthened local, State and National capacities and actions to implement integrated ecosystem-based management through "ridge to reef" approach on the High Islands though not to the targeted levels envisaged. The biodiversity tool METT scores, the PA capacity scorecard, and the SLM capacity scores for targeted PAs, SLM, and PA management capacity were generally achieved as targeted with improved management capacities amongst all PA and SLM stakeholders. However, there appears to be room for more improvements despite these tools not accurately reflecting strong achievements within the communities (Para 149).

E-9. With the IEMPs for Pohnpei, revised KLUP for Kosrae and the FSPs for Chuuk and Yap all being finalized, including endorsement of FSPs at the community level, ecosystems rehabilitation for upland forests, mangroves and wetlands including tree planting and DLPs are being implemented. All 4 states were making good progress to finalize PA management plans to gain access to regional and national technical and fiscal resources. These actions send signals that communities are serious about ecosystem sustainability and the conservation of their natural resources (Para 150).

Table B: Evaluation Ratings Table

1. Monitoring & Evaluation (M&E)	Rating[1]
M&E design at entry	**4**
M&E Plan Implementation	**5**
Overall Quality of M&E	**5**
2. Implementing Agency (IA) Implementation & Executing Agency (EA) Execution	
Quality of UNDP Implementation/Oversight	**4**
Quality of Implementing Partner Execution	**5**
Overall quality of Implementation/Execution	**4**
3. Assessment of Outcomes	
Relevance	**2**[2]
Effectiveness	**5**
Efficiency	**4**
Overall Project Outcome Rating	**5**
4. Sustainability	Rating[3]
Financial sustainability	**3**
Socio-political sustainability	**3**
Institutional framework and governance sustainability	**3**
Environmental sustainability	**3**
Overall Likelihood of Sustainability	**3**

E-10. Recommendations from this Evaluation are as follows:

- *Recommendation 1 (to UNDP, DECEM and state entities): The Project should develop an overall lessons learned for future projects to avoid repeating the same mistakes (Para 152);*

[1] Evaluation rating indices: 6=*Highly Satisfactory (HS)*: The project has no shortcomings in the achievement of its objectives; 5=*Satisfactory (S)*: The project has minor shortcomings in the achievement of its objectives; 4=*Moderately Satisfactory (MS)*: The project has moderate shortcomings in the achievement of its objectives; 3=*Moderately Unsatisfactory (MU):* The project has significant shortcomings in the achievement of its objectives; 2=*Unsatisfactory (U)* The project has major shortcomings in the achievement of its objectives; 1=*Highly Unsatisfactory (HU):* The project has severe shortcomings in the achievement of its objectives.

[2] Relevance ratings: 1=Not relevant; 2=Relevant

[3] *4 = Likely (L):* negligible risks to sustainability;
3 = Moderately Likely (ML): moderate risks to sustainability;
2 = Moderately Unlikely (MU): significant risks to sustainability;
1 = Unlikely (U): severe risks to sustainability; and
U/A = unable to assess.

- *Recommendation 2 (to UNDP, DECEM and state entities): Source sustainable funding to strengthen regulations and enforcement measures for achieving LDN and mainstreaming SLM/BD as well as developing an approved national action programme to for SLN/LDN that can be implemented at the state level (Para 153);*
- *Recommendation 3 (to UNDP, DECEM and state entities): To achieve sustainable and integrated land and sea management, continue to provide support for the strengthening of capacities of government on supply of information and decision support tools (Para 154);*
- *Recommendation 4 (to UNDP, DECEM and state entities): Find the means to raise and maintain the capacities of communities and civil society to reduce marine and land degradation on their own (Para 155);*
- *Recommendation 5 (to UNDP, DECEM and state entities): With implementation of community management plans for PAs being reliant on donor funding, simplify the fund disbursement process to improve the access to fundings (Para 156);*
- *Recommendation 6 (to UNDP, DECEM and state entities): Ensure and increase community awareness of the need for conservation of marine and terrestrial ecosystems, PAs and biologically important watersheds (Para 157);*
- *Recommendation 7 (to UNDP and the GoFSM): Change implementation arrangements that will result in a more collaborative management of this Project and other projects such that administrative duties of GoFSM counterparts are minimized (Para 158);*
- *Recommendation 8 (to UNDP, DECEM and state entities): Maintain the good work that has work contributed to ensuring equal representation that offsets the heavily male-dominated sectors by having good representation of women in TACs in Kosrae, Yap and Chuuk, and increasing the effective enforcement of legislation that criminalises domestic violence (Para 159)*.

E-11. Lessons learned from implementing the FSM R2R Project include:

- *Lesson #1: Working with financially capable NGOs can sometimes overcome difficulties in the procurement of goods and implementation of activities (Para 160);*
- *Lesson #2: Build awareness and knowledge within communities by implementing a bottom-up approach that is beneficial for capturing traditional knowledge, raising awareness within communities of the consequences of their own actions on their environment and resources and external development activity, and to transparently inform them on the process that is being implemented (Para 161);*
- *Lesson #3: Learning exchanges are the most effective tools for raising awareness (Para 162)*;
- *Lesson #4: Identify leaders who are particularly interested in and passionate about the process and could serve as 'champions' (Para 163);*
- *Lesson #5: In the FSM, political changes, staff turnover, insufficient technical staff or officers is a challenge to the pace of implementation of project such as the FSM-R2R Project (Para 164); and*
- *Lesson #6: Spreading out the timeline for SEAs, IEMPs, and other plans helps alleviate the strain on stakeholders and partners on very intensive processes (Para 165).*

1. INTRODUCTION

1. The Terminal Evaluation (TE) for the ***"Implementing an integrated "Ridge to Reef" approach to enhance ecosystem services, to conserve globally important biodiversity and to sustain local livelihoods in the Federated States of Micronesia"*** (also known as the *FSM R2R Project* or *the Project)* is to assess the achievement of the Project objective through activities under 2 components and by "focusing on expected and achieved accomplishments, critically examining the presumed causal chains, processes, and attainment of results, as well as the contextual factors that may enhance or impede the achievement of results. Evaluations focus on determining the relevance, impact, effectiveness, efficiency and sustainability of UNDP work in order to make adjustments and improve contributions to development." [4] This TE will, amongst other reasons, primarily assist the Government of the Federated States of Micronesia (GoFSM) and UNDP programme managers to incorporate lessons learned that can both improve the sustainability of this Project, and provide enhancements to UNDP programming moving forward. This TE covers the implementation period of the Project from November 2015 to the present.

1.1 Evaluation Purpose

2. The overarching purpose of this Terminal Evaluation (TE) is *to independently assess the FSM R2R Project to help UNDP improve performance and results of ongoing and future programmes and projects.* This TE is to: has an *accountability* objective (assessing project performance and results) and a *learning* objective (improving actions):

- serve the *accountability* objective to assess the implementation of the Project towards the achievement of Project objectives and outputs specified in the Project Document and the success towards achieving the intended results. The evaluation serves an important accountability function, providing national stakeholders and partners in the FSM with an impartial assessment of the results of Project's intervention;
- serve the *learning* objective to ascertain how beneficiaries have benefited from Project interventions. This would include what lessons could be learned that can both improve the sustainability of benefits from this Project, and aid in the overall enhancement of UNDP programming moving forward. While understanding progress towards results is essential for accountability purposes, it is important that the assessment of progress is then used as a foundation for learning on what has worked well (and why) and what has not worked so well (and why). To address this objective, the TE will assess the broader FSM-R2R strategy and processes, exploring elements such as Project scope, planning and coordination. Such an assessment is essential if the TE is to develop an understanding of the Project's overall performance;
- assess and document project results, and the contribution of these results towards achieving GEF strategic objectives aimed at global environmental benefits;
- gauge the extent of project convergence with other priorities within the UNDP country and regional programmes, including poverty alleviation or SDGs such as sustainable communities, decent job and economic growth; strengthening resilience to the impacts of climate change, reducing disaster risk and vulnerability, as well as cross-cutting issues such gender equality, empowering women and supporting human rights.

[4] UNDP Evaluation Policy accessible from: http://web.undp.org/evaluation/policy.shtml

1.2 Scope and Methodology

3. The scope of the TE is the assessment of the Project within the parameters of relevance, effectiveness, efficiency, sustainability, impact and incorporation of human rights, gender and other cross-cutting issues, against what was expected to be achieved. This TE will assess Project performance against targets set out in the Strategic Results Framework (SRF) in the approved ProDoc (as shown in Annex B). Key strategic issues addressed on this TE include:

    - the FSM-R2R Project is being housed within the GoFSM with the Department of Environment, Climate Change and Emergency Management (DECEM) with teams in each of the 4 states working with different stakeholders. The 4 states within the FSM have their own state governments (as well as language and culture) that function "fairly" autonomously, along with traditional and municipal levels of government;
    - teams in the 4 states consisting of a State Coordinator and a Technical Officer (with both staff in Chuuk, 1 Coordinator in Yap, 1 Technical Officer in Kosrae, and no state staff remaining in Pohnpei at the time of this TE) to reach out to stakeholders. Each State Coordinator works with a Technical Advisory Committee (TAC) comprised of stakeholders from government agencies related to environment, community representatives, as well as traditional and municipal leaders, to look at work plans and provide feedback. The Project also has field rangers to assist with field work and monitoring in 3 of the 4 states;
    - the Project Implementation Unit (PIU) consisting of a Project Manager (PM) and a Financial Administrator located in Palikir, and a National Technical Coordinator (NTC) located in Yap. An International Consultant also previously served as Chief Technical Advisor (CTA) to the Project, but was no longer contracted by the time of this TE;
    - much of the work being subcontracted out to local and international consultants, CSOs and NGOs. Despite the roster of "qualified" persons to work on the Project, there are shortages of personnel; one person can perform 10 different tasks and everyone works very closely with another. Hence, there is a need to be careful with relationships with all stakeholders;
    - stakeholders generally being community-oriented and not be readily available for interview on short or long notice. It could take weeks to interview some stakeholders considering their distances and availability of communication.

4. The methodology of this TE essentially assesses the Project's performance from November 2015 to September 2022 in addressing the capacity gaps in managing the Project's affairs, through the lens of UNDP evaluation criteria of **relevance, effectiveness, efficiency, sustainability**, and **impact** for one objective and 2 expected outcomes that were achieved through a number of outputs and activities contained within the FSM-R2R Project:

    - *Relevance* – the extent to which the outcome is suited to local, state and national development priorities and organizational policies, including changes over time;
    - *Effectiveness* – the extent to which an objective was achieved or how likely it is to be achieved. This would include the effectiveness of the FSM-R2R Project to assist implementation and facilitate capacity building (through technical assistance of the Project), and the quality of FSM-R2R Project management (including M&E performance);
    - *Efficiency* – the extent to which results were delivered with the least costly resources possible. This would include the pace of capacity building based on the baseline capacities of the institutions and potential beneficiaries;

- *Sustainability* - The likely ability of an intervention to continue to deliver benefits for an extended period of time after completion. This would include sustained acceptance of FSM-R2R methodologies for capacity building at regional and national levels; and
- *Impact* – The positive and negative, foreseen and unforeseen changes to and effects produced by a development intervention. This may include the extent of uptake by national implementation teams to FSM-R2R Project methodologies, and their resulting ability to confidently formulate and facilitate financing solutions.

5. The TE achieves these assessments by collecting credible, useful, and evidence-based information of the Project; interviewing selected stakeholders to triangulate information; and bringing up these key issues in strengthening capacity building within the FSM-R2R Project team and its stakeholders. The evaluation of the Project is based on evaluability analysis consisting of formal (clear outputs, indicators, baselines, data) and substantive (identification of problem addressed, SRF) inputs. Considering the information to be provided into this TE (which is mainly whether of not the technical assistance of the Project was effective to FSM-R2R and the GoFSM and its stakeholders), the implication of the proposed methodology is that it should be effective in the TE process, and should inform stakeholders and the Project team as it possibly transitions into another Project phase.

6. This TE also evaluates the progress and quality of implementation against the indicators of each objective and outcome in the Strategic Results Framework (SRF) as provided Appendix F. The TE process was conducted in a spirit of collaboration with FSM-R2R Project personnel with the intention of providing constructive inputs that can inform activities of a future phase of the FSM-R2R Project**.**

1.3 Structure of the Evaluation

7. This TE report has been prepared as follows:

- An overview of Project activities has been provided from the commencement of operations in November 2015 to the present activities of the FSM-R2R Project;
- A review of all relevant sources of information have been provided including documents prepared during the PPG phase (i.e. PIF, UNDP Social and Environmental Screening Procedure/SESP), the Project Document (ProDoc), Project progress reports, and any other materials that the team considers useful for this evidence-based evaluation;
- Information from stakeholders who have Project responsibilities (as listed in Para 9) was collected from a participatory and consultative approach to ensure close engagement with stakeholders. With the restrictions of the International Evaluator to travel to site, the International Evaluator had to resort to on-line virtual interviews with the Project's stakeholders;
- An assessment of results was prepared based on Project objectives and outcomes through relevance, effectiveness and efficiency criteria;
- An assessment of progress and sustainability of Project outcomes was conducted;
- An assessment of monitoring and evaluation systems of the Project was conducted; and
- Conclusions, recommendations and lessons learned were provided.

8. This TE report has been designed to meet GEF's "Guidelines for Conducting Terminal Evaluations of UNDP-Supported, GEF Financed Projects" of 2020[5] as well as UNDP guidelines "Evaluation during COVID-19" (updated to June 2021)[6].

1.4 Data Collection and Analysis

9. A desk review was carried out of the key documents underpinning the Project's scope of work. This includes a review of the CEO document, PIRs, the MTR as well as any other reports that were provided by the PIU and the UNDP Fiji Country Office. Following the desk review, the International Evaluator augmented the documented evidence through an agreed set of interviews including:

- interview questions that account for gender; and
- interviews with key partners and stakeholders in a gender disaggregated manner.

10. Different key groups involved in the Project were consulted including:

- PIU. This involved interviews with UNDP and PIU. The purpose of contact with UNDP and the PIU were "rich" issues of implementation and execution. Persons for interviews were conducted via Zoom;
- National executing partners. This involved Zoom discussions with government entities who were recipients of capacity building activities;
- Local executing partners. This involved Zoom or phone discussions with state, traditional or municipal government entities who were provided with technical assistance;
- Beneficiaries. This involved Zoom discussions with the general public who were to benefit from the Project's efforts for sustainable land management (rehabilitation and tree planting, improvements of water sources, piggeries, integrated land management plans) and protected areas land management (build up protected areas networks, community-up rather than government-down, building capacity and connecting all land owners towards a common goal of sustainability). Emphasis was placed on women's groups, youth groups, and people living with disabilities (of which the 2010 FSM census claims to be 11% of the population).

11. Data and information collected were then analyzed and fed into the TE, primarily coming from:

- project documentation that includes all reports related to the FSM R2R Project;
- an analysis of Zoom interviews with selected stakeholders including the PMU, to ensure the information from interviews and reviewed documents are triangulated, providing assurances that the conclusions of the evaluation are robust.

A full list of persons interviewed is provided in Appendix B.

[5] Available at: http://web.undp.org/evaluation/guideline/documents/GEF/TE_GuidanceforUNDP-supportedGEF-financedProjects.pdf
[6] Available at: http://web.undp.org/evaluation/guideline/documents/covid19/update/June2021/UNDP%20DE%20Guidance%20Planning%20and%20Implementation%20during%20COVID19%203%20June%202021.pdf

1.5 Ethics

12. This Terminal Evaluation has been undertaken as an independent, impartial and rigorous process, with personal and professional integrity and was conducted in accordance with the principles outlined in the UNEG Ethical Guidelines for Evaluations, and the UNDP GEF M&E policies, specifically the August 2020 UNDP "Guidance for Conducting Terminal Evaluations of UNDP-supported, GEF-financed Projects"[7].

1.6 Limitations

13. There were limitations to this TE process, mainly due to the COVID-19 pandemic and the inability of the International Evaluator to travel to the Project site to conduct face-to-face meetings with stakeholders and the PIU. The limitations were partially offset by International Evaluator who conducted virtual meetings to collect data and information from stakeholders on the ground who processed the data and information for the TE report. However, the International Evaluator was not able to take the opportunity to get to know the stakeholders better. Actual visits to the offices of the stakeholders and the PMU by the International Evaluator are usually an opportunity for the stakeholders and the PMU to make a 2-3 hour presentation followed by question-and-answer period. This has many intangible benefits including the collection of information not documented. With virtual visits on Zoom, the opportunity to make these 2-3 hour presentations and conduct a question-and-answer period is limited. By this limitation to the International Evaluator, he has limited exposure to the stakeholder teams, and as such, the Terminal Evaluation to a large extent is dependent on the information gathered by the International Evaluator and the documentation from progress reports and other reports. This partially limits the Terminal Evaluation in terms of findings.

[7] Ibid 5

2. PROJECT DESCRIPTION AND DEVELOPMENT CONTEXT

2.1 Project Start and Duration

14. The FSM-R2R Project commenced as of 19 November 2015. The Project was to be operational up to 19 November 2022.

2.2 Development Context

15. The Federated States of Micronesia (FSM) comprise an independent and sovereign island-nation consisting of four States spread across the Western Pacific Ocean from west to east: Yap, Chuuk, Pohnpei and Kosrae. The FSM are comprised of 607 islands that stretch longitudinally over 1 million mi^2 of the western Pacific Ocean and 1,200 miles wide, located between 6 and 10 degrees north of the equator. The combined land area the FSM (High Islands and Atolls) is approximately 728 km^2 with 2,700,000 km^2 of an Exclusive Economic Zone (EEZ) in the Pacific Ocean. The total area of High Island is approximately 658 km^2 (Yap 97 km^2, Chuuk 95 km^2, Pohnpei 358 km^2 and Kosrae 110 km^2).

16. The population of 103,000 is distributed with 50% on Chuuk, 33% on Pohnpei, 10% in Yap and the rest in Kosrae with 11% being disabled. The Human Development Index (HDI) value for 2012 was 0.645, placing it in the medium human development category, 117 out of 187 countries and territories. FSM receives approximately $130 million annually guaranteed funds until 2023 under a Compact Agreement with the USA; these funds are invested in education, health, infrastructure, public sector capacity building, private sector development, and environmental management.

17. FSM's agriculture sector is a major part of the economy, most of which is subsistence agriculture that is not recorded in the GDP, with over 60% of FSM's population dependent on subsistence farming and fishing. Swine production constitutes the primary livestock industry with pigs playing an important part in local culture. The FSM also receives income from the sale of fishing licenses to foreign fleets operating in its EEZ. There is also an emerging tourism industry in some States, and the US has created a Trust Fund providing long-term financial sustainability of FSM after 2023.

2.3 Problems that the FSM R2R Project sought to address

18. Despite marine and terrestrial biodiversity and ecosystem services being so vital to food security and the economy of the FSM, there are threats from unsustainable resource use practices and overharvesting of resources leading to the spread of invasive alien species and greater impacts from climate change. In 2014, the Government of the Federated States of Micronesia (GoFSM) had requested UNDP assistance in designing and implementing a project due to UNDP's track record and extensive experience in Asia and the Pacific in integrated policy development, human resources development, institutional strengthening, and non-governmental and community participation. The FSM R2R Project was designed to engineer a paradigm shift in the management of natural resources from ad hoc centric approaches to a holistic ridge to reef management approach, where whole island systems are managed to enhance ecosystem services, to conserve globally important biodiversity and to sustain local livelihoods.

19. The Project has promoted an integrated approach towards fostering sustainable land management and biodiversity conservation, seeking to balance environmental management with development

needs. One of the activities was to set-up a multi-sector planning platform to balance competing environmental, social and economic objectives. This was being done to reduce conflicting land-uses and improve the sustainability of upland and mangrove forest and wetlands management to maintain the flow of vital ecosystem services and sustain the livelihoods of local communities. The Project was also designed to demonstrate sustainable land management practices, testing new management measures to reduce existing environmental stressors, enhance the FSM's capacities to effectively manage its protected areas estate, as well as increase the terrestrial and marine coverage of the Protected Area (PA) system on the High Islands.

20. UNDP has an established national representation in the FSM UN Joint Presence Office (established in 2008) in Kolonia, Pohnpei with well-developed working relationships with the key stakeholders. In 2021, a specific UNDP office for the North Pacific was created as part of the reorganization. With a country development manager dedicated to FSM's affairs, this office is supported by Senior Management staff at the UNDP Fiji Multi-country Coordinating Office. Moreover, the Project also benefits from the presence of a UNDP/GEF Regional Technical Advisor dedicated to Biodiversity in the Bangkok Regional Hub. The United Nations Development Pacific Strategy 2018-2022 has identified, under Outcome 1: "Climate Change, Disaster Resilience, and Environmental Protection" as a priority where "by 2022, people and ecosystems in the Pacific are more resilient to the impacts of climate change, climate variability and disasters; and environmental protection is strengthened"..

2.4 Development Objective of FSM R2R Project

21. The UNDP-GEF Project support to the FSM R2R Project was designed to support the implementation of a planning process starting in November 2015 for a duration of 5 years and implemented through the Department of Environment, Climate Change and Emergency Management (DECEM). The Project objective was to "strengthen local, State and National capacities and actions to implement integrated ecosystem-based management through 'ridge to reef' approach on the High Islands of the four States of the FSM". To achieve this objective, the Project encompasses 2 outcomes to be achieved, as presented in the SRF contained in Appendix F.

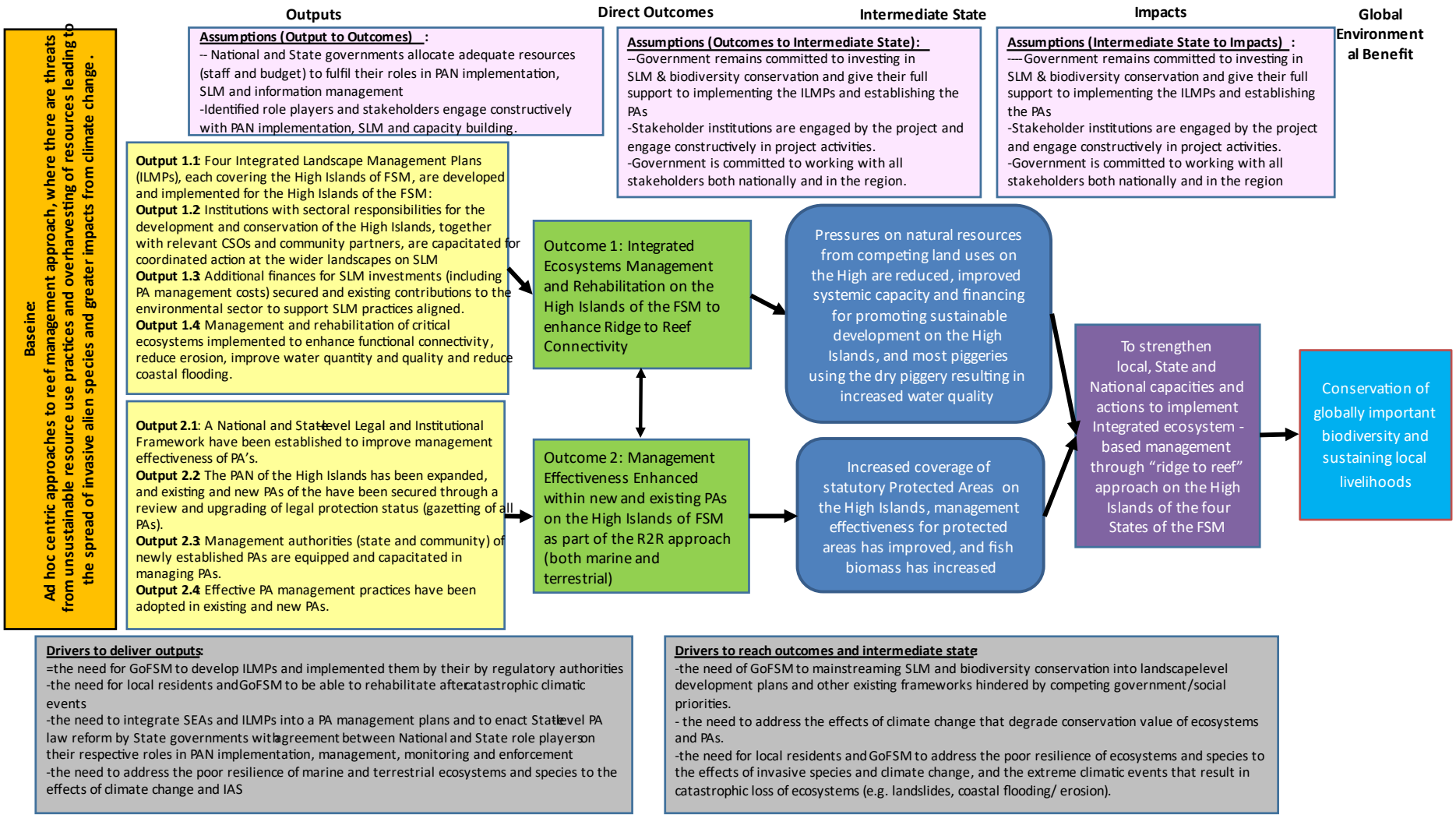
2.5 Description of the Project's Theory of Change

22. No Theory of Change (ToC) was completed for this Project. Instead, a Project strategy was employed as described in Para 38. A ToC was constructed for this TE as depicted in Figure 1. It is important to distinguish the planning activities of the Project that leads to the long-term goal or impact of FSM R2R to provide sustainability to a 'ridge to reef' ecosystem-based that is managed with an integrated approach, all in efforts to generate global benefits of conserving globally important biodiversity and sustaining local livelihoods.

2.6 Expected Results

23. The United Nations Development Pacific Strategy 2018-2022 identified "Climate Change, Disaster Resilience, and Environmental Protection" (under Outcome 1) as a priority where "by 2022, people and ecosystems in the Pacific are more resilient to the impacts of climate change, climate variability and disasters; and environmental protection is strengthened". This outcome was to be achieved on the FSM R2R Project through 2 outcomes:

Figure 1: FSM-R2R Theory of Change



- Outcome 1: Integrated ecosystems management and rehabilitation on the High Islands of the FSM to enhance Ridge to Reef to be achieved through delivery of the following outputs:
  - Output 1.1: Four Integrated Landscape Management Plans (ILMPs) are developed and implemented for the High Islands of the FSM;
  - Output 1.2: Institutions with sectoral responsibilities for the development and conservation of the High Islands, together with relevant CSOs and community partners, are capacitated for coordinated action at the wider landscapes on SLM;
  - Output 1.3: Additional finances for SLM investments (including PA management costs) secured and existing contributions to environmental sector to support SLM practices aligned;
  - Output 1.4: Management and rehabilitation of critical ecosystems implemented to enhance functional connectivity, reduce erosion, improve water quantity and quality and reduce coastal flooding.
- Outcome 2: Management effectiveness enhanced within new and existing PAs on the High Islands of FSM as part of R2R approach (both marine and terrestrial) to be achieved through delivery of the following outputs:
  - Output 2.1: National and State-level Legal and Institutional Frameworks have been established to improve management effectiveness of PAs;
  - Output 2.2: The Protected Areas Network (PAN) of the High Islands has been expanded, and existing and new PAs of the FSM have been secured through a review and upgrading of legal protection status (gazetting of all PAs);
  - Output 2.3: Management authorities (state and community) of newly established PAs are equipped and capacitated in managing PAs;
  - Output 2.4: Effective site and cross-site level PA management practices promoted in new and existing PAs.

24. The Project promoted an integrated approach towards fostering sustainable land management and biodiversity conservation, seeking to balance environmental management with development needs. One of the activities was to set-up a multi-sector planning platform to balance competing environmental, social and economic objectives. This was being done to reduce conflicting land-uses and improve the sustainability of upland and mangrove forest and wetlands management to maintain the flow of vital ecosystem services and sustain the livelihoods of local communities. The Project was also designed to demonstrate sustainable land management practices, testing new management measures to reduce existing environmental stressors, enhance the FSM's capacities to effectively manage its protected areas estate, as well as increase the terrestrial and marine coverage of the Protected Area (PA) system on the High Islands.

2.7 Total Resources for the FSM R2R Project

25. The total resources allocated to this Project at time of ProDoc signature is provided in Table 1.

Table 1: Total Resources for the FSM R2R Project

Component	GEF Resources	Planned Co-Financing Resources
Outcome 1	$1,798,950	$6,770,815
Outcome 2	$2,667,540	$10,265,035
Project Management (including M&E)	$223,325	$850,548
Total	**$4,689,815**	**$17,886,398**

2.8 Main Stakeholders

26. Stakeholders are numerous on this Project. They are categorized on Para 47 with more stakeholder details provided in Section 3.2.2.

2.9 Key Partners involved with the FSM-R2R Project

27. A key partner for the FSM R2R Project was the Department of Environment, Climate Change and Emergency Management (DECEM).

2.10 Context of other ongoing and previous evaluations

28. A Mid-term Review (MTR) for the FSM R2R Project was issued in July 2019 to assess progress towards the achievement of Project objectives and outcomes as specified in the ProDoc. In addition, it also assessed "early" signs of Project successes and failures with the goal of identifying the necessary changes to be made to reset the Project to achieve intended results.

3. FINDINGS

3.1 Project Design and Formulation

29. Project Preparation Grant (PPG) approvals for the FSM's Ridge to Reef Project (FSM R2R) were received on 12 September 2013, and final GEF CEO Endorsement approval of the full FSP was received in July 2015 and the ProDoc signature on 19 November 2015, marking the FSM R2R Project starting date. Classified as a GEF Full-sized Project (FSP), the FSM R2R Project received GEF support of $4.7 million with original co-financing proposed at US$17.9 million for a total original Project budget of US$22.6 million under National Implementation Modality (NIM). The FSM's Department of Environment, Climate Change and Emergency Management or DECEM (formerly known as the Office of Environment and Emergency Management or OEEM) was designated as the key national executing partner. The Project approval period was approximately for 60 months with the original closing date scheduled for 19 November 2020.

30. Pre-inception consultations were held from 17-21 October 2016 with key government and NGOs stakeholders, and an Inception Workshop was conducted from 25-26 October 2016, marking the start of Project implementation. The Project aimed to promote an integrated approach towards sustainable land management (SLM) and biodiversity (BD) conservation, seeking to balance environmental management with development needs. It sought to create an operational, multi-sector planning platform to balance competing environmental, social and economic objectives among different sectors of the economy. This would reduce conflicting land uses and improve the upland and mangrove forests, and wetlands management to maintain the flow of vital ecosystem services and sustain the livelihoods of local communities. Furthermore, testing new SLM practices would be demonstrated to reduce existing environmental pressures.

31. As stated in the ProDoc, the FSM R2R Project sought to implement integrated ecosystem-based management through a "ridge to reef" approach on the High Islands of the 4 States of the FSM. The Project aimed to protect, demonstrate sustainable approaches, and provide better economic understanding of the links between terrestrial, freshwater and marine ecosystems. Well-managed coastal and estuarine ecosystems support livelihoods, income from fisheries, agriculture, tourism, and buffers from the impacts of climate change. Wetland and marine environments (including coral reefs) are less vulnerable to damage and deliver greater ecosystem services when rivers are kept healthy. Solutions to water pollution are found in coordinating the use and management of land and water at landscape scales from source to sea. With a focus on river basins and coasts, the Project approach is a holistic ecosystem-based or landscape-scale approach to land-use management and biodiversity conservation that focuses on the terrestrial, aquatic, estuarine and coastal ecosystems, and the linkages between these ecosystems. The Project approach focused on the main islands ("high islands" where the majority of terrestrial biodiversity and FSM population resides) of each State that have some elevation, rather than on the atoll islands. This was to enhance the sustainability of natural resources and conservation of biodiversity through understanding and promoting sustainable land-use practices and strengthening management capacity

32. Yap State spans some 25,899,881 ha of ocean with a land base of 11,633 ha spread over 134 islands and atolls, 22 of which are populated. Lying at the western end of FSM, Yap lies in an area that generally experiences a monsoon climatic pattern with some frequent periods of drought. The 3 High Islands of Yap (Yap proper, Maap and Rumung) have a land area of 9,641 ha) and closely clustered appearing as a single island resulting in condensed natural communities from ridge top (174 m) to

reef. The majority of land on Yap, including mangrove forests, is privately owned under a complex traditional tenure system. Agriculture is undertaken mainly for subsistence.

33. Chuuk State is a group of 14 partially sunken volcanic islands surrounded by Chuuk Lagoon, a barrier reef spanning 63 km in diameter, and a number of outlying coral atolls and islands. The volcanic islands are characterised by steep uplands, which comprise 73% of the total land area. The maximum elevation on Weno Island is 370 m, Dublon 344 m, Fefan 300 m and Tol 443 m. Chuuk is the most populated state in the FSM. Chuuk Lagoon has a land area of 12,691 ha and a high population density of 3.72 persons/ha. The lagoon islands of Chuuk State have the highest percent of land under agroforestry of the high islands of Micronesia with the main subsistence crops being banana, breadfruit, coconuts and taro.

34. Pohnpei State includes the high island of Pohnpei and a number of small islets situated within a large lagoon, and Outer Atolls. Pohnpei Island is a steep and mountainous volcanic island with a land area of about 35,500 ha and 11 peaks rising more than 600 m above sea level. The interior vegetation is dominated by upland-forests with 2002 figures showing only 13% remaining with sporadic occurrence of sakau (kava) fields. Areas of intact native upland forests are of special interest because of the high rate of endemism. The coastal areas and lower slopes are characterised by agroforestry (33%) and secondary vegetation (5%). Agroforestry has been expanding rapidly in recent decades. Agriculture is undertaken mainly for subsistence, the main crops being yam, banana, betel nut, vegetables, taro, coconut, citrus and cassava. The State owns much of the lagoon area, thus facilitating the establishment of State-owned marine protected areas.

35. Kosrae State located at the eastern end of FSM, is roughly triangular with an area of about 11,000 ha characterised by steep mountains covered with dense forest. Several mountain peaks rise to 600 m above sea level and deep wet valleys link the basaltic uplands to a wide alluvial plain along the island's perimeter. Most of the island's 6,616 inhabitants (2010 census) live along this perimeter. Mountainous areas make up about 70% of the island, with foot slopes, alluvial fans, and bottomlands comprising another 15% of the area. Approximately 14% of the island is vegetated by mangrove swamps. Other vegetation types include upland forest, Swamp Forest, Mangroves, Cloud Forest, Secondary Forest, Agroforest, Marsh and Savanna Grassland. The island is fertile, though much of it is steep and inaccessible. Agriculture is undertaken mainly for subsistence, the main crops being yam, banana, betel nut, vegetables, taro, coconut, citrus and cassava.

36. The FSM-R2R Project has mainly focused on capacity building, analysis of pertinent Protect Area Networks and SLM legislation and awareness-raising in R2R pilot sites. To strengthen local, State and National capacities to plan, implement, monitor the enhanced sustainability of natural resources and conservation of biodiversity, the Project facilitated workshops in the preparation of Integrated Environmental Management Plans (IEMPs) and PA management plans, and adapted them as required according to lessons learned from the implementation processes. PA management effectiveness was to be measured using GEF's Management Effectiveness Tracking Tool (METT). While this may not be the most objective measurement of conservation, it was deemed to be the most effective means of measuring what is being protected and what is needed to ensure resilience to overuse of natural resources.

37. The ProDoc identified two barriers for achieving effective integrated land-sea and protected area management):

- Barrier 1: Lack of an overarching framework for promoting sustainable development in the FSM's High Islands, including systemic capacities and availability of critical information, knowledge and funding;
- Barrier 2: Inadequate PA representation and capacities to effectively conserve biodiversity of the High Islands of the FSM.

3.1.1 Analysis of Strategic Results Framework for FSM R2R Project

38. The FSM R2R Project objective and outcomes are clear. However, there were indicators that were insufficiently specific and not achievable in the November 2015 SRF. This lack of clarity and coherence with outputs, activities and indicators was covered in the MTR, leading to a revision of the SRF in June 2020. To achieve the overall Project objective of "strengthening local, State and National capacities and actions to implement an integrated ecosystems management through 'ridge to reef' approach on the High Islands of the four States of the FSM," outcomes were set with several activities per outcome with each activity coming with its set of sub-activities. Normal practice at preparing SRFs usually sets activities to be implemented to deliver an output, with the outputs together, if delivered, allowing for the achievement of an outcome. The SRF structure makes it difficult to directly link activities with outputs.

39. The June 2020 revisions to the SRF reflected the need for more specificity and achievability in the SRF indicators and targets. At the objective level:

- ILMPs were replaced with an IEMP, land use plans and forest stewardship plans;
- METT scorecards included 20 priority PAs covering 31,877 ha, which is more than the 40 PAs covering 24,986 ha in the November 2015 SRF;
- scorecard for Sustainable Land Management Capacity Development was corrected from a baseline of 50% to 56% to a target that was also rectified from 70% to 75%;
- scorecard for PA Management Capacity Development was corrected from a baseline of 55% to 50% to a target that was amended to reduce from 75% to 70%;
- the indicator of "% of the FSM population" was revised to clarify that this percentage refers to MPA communities rather than the overall FSM population.

40. For Outcome 1, changes made to the SRF in June 2020 included:

- the "number of Integrated Landscape Management Plans being implemented" being changed to be more specific to "Number of Integrated Environmental Management Plans (IEMP)/Land Use Plans and Forest Stewardship Plans being implemented"
- the changing of the indicator "enhanced cross-sector enabling environment for integrated landscape management as per PMAT score" to "revival of cross-sector working groups for integrated landscape management" with new targets that are more specific and achievable;
- the targets for "extent of ecosystems rehabilitated…", changed from 350 ha to 30 ha for upland forests, and from 50 ha to 20 ha for mangroves and wetlands;
- changes to the indicator from "% of piggeries using the dry litter piggery system within the Ipwek, Dachngar, Finkol and Nefounimas" to % of piggeries using the dry litter piggery system within targeted catchments;
- addition of an indicator that aims to measure water quality through E.Coli, with target to "maintain or increase water quality in targeted catchments" against the baseline.

41. For Outcome 2, changes made to the SRF in June 2020 included addition of an indicator that monitors the "number of knowledge exchanges via (i) lessons learned disseminated through State wide events and other regional platforms; and (ii) most significant change stories shared nationally and regionally". There were no changes to the targets to the coverage of statutory PAs in the High Islands of 14,953 ha for marine; the 25,000 ha target was a typographical error made in the revised SRF. The correct target for terrestrial PAs is 10,033 ha.

42. In conclusion, the Project design and SRF are rated as ***moderately satisfactory***. The SRF was revised in June 2020 to reflect more realistic targets for the Project. This was done and post 2020 Progress Reports are based on the new SRF indicators with defined indicators generally not being SMART and not defined as indicators. However, the baseline, target, source of verification and risks and assumptions are logically set.

3.1.2 Assumptions and Risks

43. Assumptions and risks are distinct under the FSM-R2R SRF. For example, under the Project objective, the following assumptions are made:

- Government remains committed to investing in SLM & biodiversity conservation and give their full support to implementing the ILMPs and establishing the PAs;
- Stakeholder institutions are engaged by the project and engage constructively in project activities;
- Government is committed to working with all stakeholders both nationally and in the region.

These assumptions as well as others assumptions on Outcomes 1 and 2 appear to be reasonable.

44. There are 10 risks listed in the FSM-R2R SRF at the objective and outcome levels. These risks are comprised of:

- Mainstreaming SLM and biodiversity conservation into landscape-level development plans and other existing frameworks hindered by competing government/social priorities (Objective level);
- The effects of climate change degrade conservation value of ecosystems and PAs (Objective level);
- Poor resilience of ecosystems and species to the effects of invasive species and climate change (Objective level);
- Extreme climatic events result in catastrophic loss of ecosystems (e.g. landslides, coastal flooding/erosion) (Objective level);
- ILMPs developed but not implemented by regulatory authorities (Outcome 1 level);
- Catastrophic climatic events reverse progress made with rehabilitation (Outcome 1 level);
- Recommendations from the SEA and ILMP not integrated into PA management plans (Outcome 2 level);
- Recommended State-level PA law reform not enacted by State governments (Outcome 2 level);
- National and State role players cannot agree on their respective roles in PAN implementation, management, monitoring and enforcement (Outcome 2 level);
- Poor resilience of marine and terrestrial ecosystems and species to the effects of climate change and IAS (Outcome 2 level).

These risks do not exactly mirror the risks in the risk log in the ProDoc, notably the absence of the SRF risk of "land/reef owners/users flout planning regulations and new protected area designations leading to extension of agricultural areas…..and intensification of fishing", "individual pig owners do not want to adopt SLM practices…… that seeks to reduce pressures on biodiversity through better land/water and natural resource management practices in water catchments", and "increasing the size of the PAN will displace exploitation, thereby intensifying ecosystem degradation outside of PAs".

3.1.3 Lessons from Other Relevant Projects Incorporated into FSM-R2R Project Design

45. The UNDP-GEF SLM Medium Size Project entitled "Capacity Building, Policy Development and Mainstreaming of Sustainable Land Management in the FSM" produced a National Action Plan (NAP) to address SLM issues by providing a national framework for SLM implementation. It achieved this through focus on 7 thematic activity areas: waste management and recycling, community-level plant and tree nursery development, composting and gardening, environmental impact assessment, rehabilitation of degraded forest ecosystems, environmental awareness and SLM scholarship opportunities. This project was executed by OEEM and was terminated in 2013.

46. The FSM-R2R Project used lessons and experiences from the 2010 UNEP-GEF project entitled the "Micronesia Challenge: Sustainable Finance Systems for Protected Area Management in 'Micronesia Challenge' States" (MC). This MC project was specifically designed to support the FSM (as well as the Republic of the Marshall Islands and the Republic of Palau) to establish sustainable finance systems and policies by 2015 to ensure sufficient resources were available to abate threats to marine and terrestrial biodiversity and effectively manage protected areas. The MC had already laid impressive groundwork to achieve its conservation and financial goals with the FSM's MC endowment funds to support goals of sustainable resources management that now has new targets to 2030 consisting of 30% land and 50% marine PAs. Funds from this GEF 4 project went into the Endowment Fund.

3.1.4 Planned Stakeholder Participation

47. Stakeholders planned for this Project were numerous. They are categorized as follows:

- national government (Government of the Federated States of Micronesia);
- state governments (Yap, Chuuk, Pohnpei and Kosrae);
- local administration such as community representatives, municipal governments and traditional leaders;
- NGOs and other civil societies such as local community organisations;
- private sector stakeholders; and
- beneficiaries who are comprised of farmers and fishermen/fisherwomen.

Stakeholders are further discussed in Section 3.2.2.

3.1.5 Linkages between the FSM-R2R Project and other interventions in the sector

48. The FSM-R2R Project was linked with other interventions in the sector including:

- SPREP and SPC assistance with implementing EIA processes;
- JICA assistance with sustainable waste management planning and recycling;

- Venezuelan Government (Venezuela Fund) co-financing of GEF SLM pilot projects such as vegetable production and compost making;
- SPC/SOPAC (GEF-funded) assistance with IWRM in Pohnpei including watershed demarcation, dry litter piggery, composting, compost toilets and biogas;
- USDA NRCS working on soil conservation and providing spatial data;
- FAO assistance with sustainable agriculture and organic farming;
- EU-funded Development of Sustainable Agriculture in the Pacific (DSAP) providing seed and implements to farmers implemented locally by the SPC;
- GEF-SGP financing of a dry-litter piggery revolving fund on Pohnpei;
- USFS technical assistance in for example vegetation mapping and land rehabilitation; and
- Initiatives and projects under The Nature Conservancy (TNC) including the collection of data on the effectiveness of the PAs.

3.1.6 Gender responsiveness of Project design

49. Gender-disaggregated indicators and targets were not present on the SRF with no attention paid to gender aspects. Out of 16 indicators, none refer to gender. The FSM has undertaken several projects related to SLM and gender, and is committed to gender to meet the MDG#3 ("Promote Gender Equality and Empower Women") through their commitments to Agenda 21. Gender Development and Human Rights Coordinator, based within the FSM Department of Health and Social Affairs, coordinates efforts to ensure that all state agencies are adhering to legislated plans for gender-responsive budgets and planning, with the objective for the FSM to achieve a greater role and representation of women in the echelon of politics, and for a more equal rate of pay in the workplace.

50. With FSM being a matriarchal society with women as the cornerstones of the communities, the FSM-R2R Project was designed to impact gender equality in a positive manner by promoting men, women and youth involvement in key decision-making processes for SLM and PA management. However, the designers of the Project clearly did not feel the need to reflect gender in the SRF, and that the Project would directly increase and sustain social equalities. In the field, the Project has ensured equal representation by having good representation of women in the Kosrae, Yap and Chuuk TACs. However, no monitoring has been done to measure gender specific changes to R2R's beneficiaries (Para 139).

3.1.7 Social and Environmental Safeguards

51. The FSM-R2R Project did prepare an SESP document where no significant changes were made during the course of FSM-R2R implementation. There was also an October 2021 COVID-19 Mitigation Plan which outlined the areas of risk to the Project from COVID-19 and the measures needed for mitigation.

3.2 Project Implementation

52. The Project was executed through an FSM-based implementing partner, the Department of Environment, Climate Change and Emergency Management (DECEM). DECEM is the lead governmental agency with overall responsibility for project implementation, and is accountable for both project and financial management including being accountable to UNDP for funding disbursements and for achieving FSM-R2R's objectives and outcomes. DECEM was responsible for:

- coordinating activities to ensure the delivery of agreed outcomes;
- certifying expenditures in line with approved budgets and work-plans;
- facilitating, monitoring and reporting on the procurement of inputs and delivery of outputs;
- coordinating interventions financed by GEF/UNDP with other parallel interventions;
- approval of Terms of Reference for consultants and tender documents for subcontracted inputs; and
- reporting to UNDP on project delivery and impact.

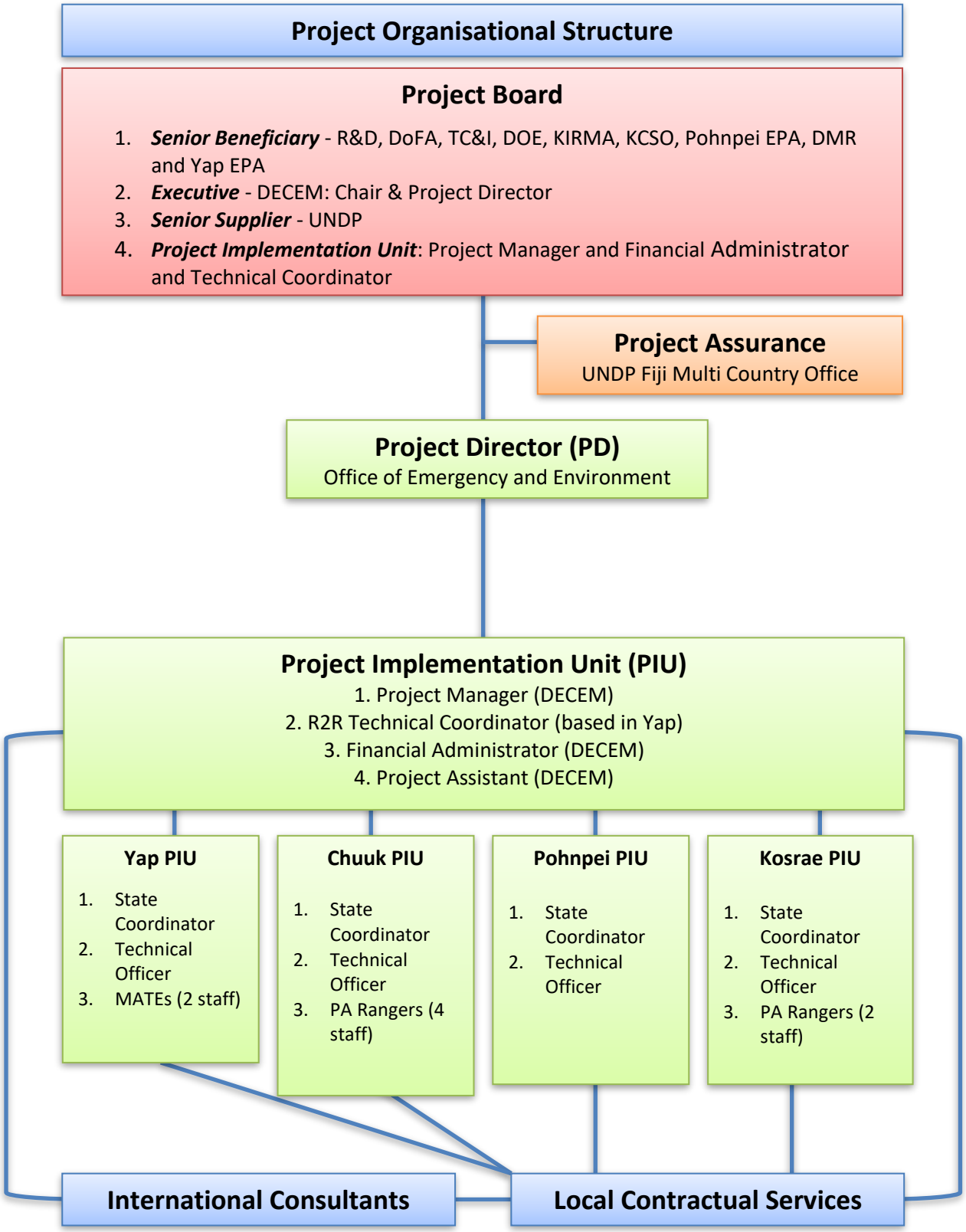
53. These functions were carried out by the Project Implementation Unit (PIU), comprised of a Project Manager, a Technical Coordinator and a Financial Administrator (Figure 1), under the overall supervision of the Project Director/Chairperson of the FSM R2R Project Steering Committee (SC). The PIU was responsible for implementing various components of the project including provision of technical leadership, managing and coordinating project activities, contracting service providers, providing oversight on the day-to-day operations of the Project, communications, monitoring and evaluation of project performance, reporting and serving as the secretariat for the SC. In each state, the PIU is represented by 4 State Coordinators and 4 Technical Officers, with support from 8 PA Rangers. Previous arrangements called for only 4 State Coordinators, with UNDP and the GoFSM agreeing to fund four additional technical officers to expedite implementation of State level activities. Each Coordinator and Technical Officer is based in the most relevant State agency responsible for implementing SLM or PA activities, as well as coordinating and developing work programs to ensure that Project activities are aligned with State priorities[8].

54. Despite these good outcomes, the PIU faced issues and challenges for continuing its support activities leading up to pilot activities:

- In Yap, Years 1-2 (2017-2018) were mainly focused on setting up TACs to provide overall guidance to implementation of State level activities, assessment of degraded coastal areas to inform selection of restoration sites, deployment of fish aggregating devices to reduce pressures on in-shore fisheries, procurement of demarcation infrastructure for PA sites, consultations with communities for selection of PA sites to be demarcated. While the Project did not fully complete all approved activities within the first 2 years, it is important to note that setting up appropriate structures to facilitate Project implementation, selection of Project sites and securing stakeholder buy-in can be time consuming. Additionally, there was weak ownership from lead implementing agencies due to limited human resources. As a result, the Project engaged local community groups to implement Project activities, some of which were delayed such as upland forest rehabilitation and streambank restoration, from 2018 to 2020, due to limited technical expertise;
- In Chuuk, SLM training of resource managers was completed in 2018 through the assistance of the College of Micronesia Land Grand Program and complimented with an "Enforcement, Compliance and Monitoring training program" for 40+ participants attending to improve their PA management capacity and promote effective site and cross-site level PA management practices in new and existing PAs. Given its unique land tenure system, the first 2 years were focused on putting in place necessary SLM legislations to support SLM activities, facilitating management planning and enforcement trainings for local PA resource managers, development of draft management plans for PA sites and demarcation of MPAs. Similar to Yap, challenges in

[8] Currently, there are 3 PIU staff, 2 State Coordinators (Yap and Chuuk), 2 Technical officers (Chuuk and Kosrae), and all 8 PA Rangers. The rest have left. Currently, there are no State-level staff for Pohnpei.

Figure 2: FSM R2R Project Organization Structure



fully achieving Year 1 & 2 targets were due to limited partner agencies with appropriate technical capacities and human resources. As a result, the Project engaged the Chuuk Women's Council (CWC) to facilitate its restoration activities in Nefo. Delays, however, from CWC led to completion of the work in 2020 instead of 2018, and the final report in 2021;

- In Pohnpei, the first 2 years were focused on establishing a TAC, a Strategic Environmental Assessment (SEA) team, IWRM outreach with 12 communities, collection of water samples for establishment of baseline data, demarcation of MPAs, facilitating consultations to secure stakeholder buy-in for the demarcation of the Kitti Watershed Forest Reserve and development of a 3D model map for the Municipality of Kitti to inform resource management. While these notable achievements were made, there were several challenges faced due to limited technical capacities within government agencies, limited human resources and lack of project ownership from one of the project's key partners, namely the Pohnpei Department of Resources and Development (R&D), responsible for resource management. This resulted with the Project engaging CSP to help facilitate community consultations, management planning activities with for development of management plans, and restoration activities;
- In Kosrae, progress was slow in the early years primarily due to focus being on dry litter piggeries (DLPs), collection of water samples to establish baseline data, facilitating management planning activities for development of PA management plans, finalizing MPAs through PA legislations and revitalizing the KCET to strengthen monitoring and enforcement of PAs. Post MTR, Kosrae was selected as the second State to undertake a SEA. However, the final draft SEA report and revised Kosrae Land Use Plan (KLUP) were not completed as of 30 June 2022, as COVID-19 travel restrictions prevented the original Project consultant from returning to Kosrae. The Project contracted a second local consultant in 2022 to assist with its completion with the final drafts to be phased over to the Kosrae Island Resource Management Authority (KIRMA), the primary implementing agency responsible for its finalization and endorsement process. Notwithstanding, many of the actions within the draft SEA and KLUP are still being implemented including a greater number of DLPs;
- A strained relationship with UNDP related to the obtaining and liquidation of GEF funds that created extra administrative work for a small team considering the time-consuming activities to provide the information required for fund returns, causing further delays in activities. This is exacerbated by the high turnover at UNDP, loss of experience and having to go through 3 to 4 finance officers with each UNDP person coming up with different understandings on how things should be done. Though UNDP has set procedures and protocols to manage funds, difficulties were experienced by the PIU to try to support this complicated administration of funds. There is a need for UNDP reporting and administrative processes to be easier for countries such as FSM to comply with or have UNDP administer the entire Project with Direct Implementation Modality (DIM).

3.2.1 Adaptive Management

55. Adaptive management is discussed in UNDP evaluations to gauge performance of project personnel to adapt to changing regulatory and environmental conditions and unexpected situations encountered during the course of implementation, both common occurrences that afflict the majority of UNDP projects. Without adaptive management, donor investments into UNDP projects would not be effective in achieving their intended outcomes, outputs and targets.

56. In 2019, the MTR was critical of the Project's adaptive management. Although quarterly reports have carefully described adaptive management measures, the Project has repeatedly been forced to deal

with unforeseen problems and surprises in a reactive, rather than proactive manner. One of the issues forcing adaptive management is the shortage of staff and the long payment delays for work being done on the Project. Anticipating these occurrences can be useful in applying adaptive management. However, the assumptions of the SRF are actually risks, limiting the ability of the Project to fully achieve the outcomes and targets in a culturally and institutionally complex, 4-State setting. The risks and their corresponding mitigation measures presented in the ProDoc are weak; rather than testing the effectiveness of robust risk-reducing measures, the Project has been in a continuous reactive mode that has created inefficiency and frustration.

57. The Project, however, has been making progress on several activities which mitigates the weaknesses in adaptive measures, starting with the revision of the SRF in June 2020. In the post-2019 period of the Project, adaptive management by FSM R2R staff came in the form of:

- Outcome 1's indicator of "extent (ha) of ecosystems rehabilitated resulting in increased delivery of ecosystem and development benefits" where upland forest targets were reduced from 350 ha to 30 ha, and mangroves and wetlands were reduced from 50 ha to 20 ha. With the majority of FSM lands being privately owned, access to sites can be challenging making the target highly challenging. Project to aim at identifying potential sites that are achievable for restoration.
- Outcome 2's indicator "legal status of 40 PAs verified in the High Islands" being a target that is too ambitious. This was reduced to 20 sites to provide improved focus for management plans and enforcement training for those sites. Management plans take several years to prepare due to staff time to conduct several community consultation sessions that require preparation time and writing of the notes that is integrated into the management plan;
- delays caused by supply chain issue to get the equipment and supplies into the country at the national level, and then having to ship them to the states, and then to the implementing teams. With few alternative options, the adaptive management measure for this was simply to delay implementation of the works;
- delays in work being done due to the COVID-19 pandemic. International travel into FSM was restricted from March 2020 to August 2022 (and until October 2022 in Chuuk), restricting travel by the international BirdLife expert team. One example of adaptive management involved travel restrictions to FSM in 2020 for the work of the BirdLife contract, which were adjusted to recordings of bird calls which were done with local teams placing recording devices along transect points, leaving them to record birdsongs, and then mailing the recordings to Australia for analysis (Para 123-124). Setting out the recordings took a lot of logistical planning due to some sites only being reachable by boat, needing local guides. Recordings of the bird calls were sent to Australia);
- very few NGOs and CBOs available with limited staff, and the amount of time needed for community-based work, since it can only occur when communities are available. As such, adaptive management of this situation is difficult with the reaction being that the work will take longer than planned.

58. Adaptive measures were not taken on delayed payments to contractors caused by the complex transfer of funds from UNDP to the Treasury of the FSM, then to the State levels to the workers. The timing of the works being done by the Project needed to be managed to minimize delays in payments. This was mostly not resolved. The PIU of the Project often followed a timeline for payments, where partners can be optimistic, not really realizing the reality of slow procurement. Despite the efforts in preparation work to implement activities in a timely manner, the information needed often is not provided in a timely manner, leading to delays. Exacerbating this was the UNDP

requirement for HACT assessments for the Micronesia Conservation Trust (MCT) RPA (Paras 91-92) and the BirdLife RPA (Para 124). An exception to this case was with the CWC who advanced funds to workers in 2021 as soon as work was done, while waiting for the UNDP and Treasury payment process to be completed. There is a need for easier and more efficient fund transfers from GEF to UNDP and GoFSM.

59. In conclusion, FSM R2R's efforts to adaptively manage this Project were ***moderately satisfactory*** in consideration of the failure to adaptively manage the Project up to 2019, but modestly practicing adaptive management after 2019. The geographical spread of FSM made it difficult to adaptively manage the Project, given that the Project team was unable to visit 2 of the states during the COVID-19 pandemic, but held regular meetings over Zoom with the State teams.

3.2.2 Actual Stakeholder Participation Partnership Arrangements

60. Throughout its implementation, FSM R2R and the PIU maintained strategic partnerships with the 4 States and relevant stakeholders in those states who are implementing initiatives supporting the ridge to reef approach. This included the Technical Advisory Committees (TACs) for each state who are a wide range of implementation partners and stakeholders involved in the Project implementation including the PAN Coordinators and Technical Officers.

61. For FSM R2R stakeholders, the collaborative process of the Project was beneficial to them by outside experts who bring in scientific tools and best practices. One example was Chuuk Women's Council, an NGO, which benefitted having best practices for conservation and environment programmes that build the capacities of local people, particularly women, so that they can become productive, self-sustaining and independent. Other examples were in Pohnpei where the Sokehs Menin Katengensed (SMK) and the Conservation Society of Pohnpei were both beneficiaries of Project assistance for best practices. SMK is a community-based NGO established in 2018 to augment conservation and environmental protection services by the municipal government through environmental conservation officers. The Conservation Society of Pohnpei is an NGO working in partnership with government, NGOs and CBOs on marine, terrestrial and awareness and education programmes.

62. State government stakeholders also benefited from regulatory advice on environmental affairs from the Project. The Pohnpei EPA benefited from Project assistance with respect to water quality and solid waste management. In Yap, regulatory capacities were built for the 119 ha Gachpar MPA with enforcement of the MPA plan with an increase in fish stocks and youth groups becoming much more interested in conservation efforts of the MPAs.

63. Overall efforts by the FSM-R2R team to forge effective partnership arrangements with various stakeholders have been ***satisfactory***.

3.2.3 Project Finance

64. The total GEF budget for the FSM R2R Project was US$4,689,815 that was to be disbursed over a 60-month period, managed by a UNDP-PIU under the direction of a Project Steering Committee. Table 2 depicts the disbursement of US$4,200,674 up to 30 September 2022, 1.5 months prior to the actual terminal date of the FSM R2R Project of 18 November 2022, revealing the following:

- There were slight deviations of actual expenditures from the ProDoc budget. The largest deviation of budgeted expenditure was in 2016 when only 13% of the scheduled ProDoc was expended, followed by 30%, 86%, 68% and 88% of the ProDoc expenditure in 2017, 2018, 2019, 2020, 2021 and 2022 respectively. This shows that the Project was off to a slow start in 2016 and 2017 with an increased pace of implementation by 2018 to date;
- Expenditures by Outcomes were reasonably on target with the largest deviation being Project management where a total of US$251,720 was expended, US$28,425 over budget;
- The overall budget surplus of US$489,141 was to be spent on Outcome 2 where both rehabilitation of marine and terrestrial ecosystems was budgeted. Table 3 shows Project expenditures by ATLAS Code.

65. The Project has also demonstrated appropriate but strict financial controls in place, notably through:

- Combined Delivery Reports (CDRs) and Project Budget Balance Report which shows the expenditure and commitments in the current year up to date (both as generated by ATLAS);
- manual monitoring of Project expenditures against budget lines to attain an in-depth understanding of the financial progress and the pending commitments;
- quarterly tranche of GEF funds only available from UNDP when a minimum of 80% of the funds from previous tranche have been spent.

66. Complaints have been made about payments of contracts. For example, a $1,000 contract can take up to 6 weeks to round out and receive approvals. When the work gets completed on time and the contractor submits his reports, it takes 6 to 8 weeks to approve: the state has it encumbered on their system while on the UNDP side, creating difficulties, and several months delay with future activities; they do not consider it encumbered adding to the approval time[9].

67. Project co-financing was estimated to be more than US$22.531 million, above the expected co-financing of US$17.886 million. Co-financing summary and details can be found on Tables 4 and 5 respectively. The TE team notes the following on the level of co-financing provided on this Project:

- The majority of co-financing was monitored by the work being done in partnership with several NGOs, state agencies and communities, much of it in-kind and not tracked to establish nurseries. The majority of co-financing comes from recurrent costs of state SLM and PA staff time and their annual budgets. This includes nurseries and tree planting as well as marine and environmental protection agency activities and awareness. For example, a coastal cleanup may involve State agencies contributing their vehicles and boats and fuel, contributions of lunches and other meals, and maintenance of these vehicles;
- Some of the tracked co-financing comes from state agencies advice on the types of trees and mangroves to be planted.

68. Overall, the cost effectiveness of the FSM-R2R Project has been **satisfactory** in consideration of the positive results achieved in the capacity building of the stakeholders involved, and the high amounts of co-financing leveraged.

[9] The financial control of spending 80% of the quarterly tranche before requesting the next drawdown (above in 65) is also impacted by this. If a contract is completed in a quarter but not yet paid out, FSM system shows that the funds obligated for the contract are not available, but for UNDP they are. The approval time for the next tranche then is impacted.

Table 2: GEF Project Budget and Expenditures for FSM R2R Project (in USD as of 30 September 2022)

Outcomes	Approved Budget (as per ProDoc)	2015[22]	2016	2017	2018	2019	2020	2021	2022[23]	Total Disbursed	Total to be expended in Oct-Nov 2022
Outcome 1: Ecosystems Management and Rehabilitation on the High Islands of the FSM to enhance Ridge to Reef Connectivity	1,798,950		16,269	159,560	454,192	272,098	273,608	360,490	251,910	1,788,128	10,822
Outcome 2: Management Effectiveness enhanced within new and existing PAs on the High Islands of FSM as part of the R2R approach (both marine and terrestrial)	2,667,540		76,387	165,626	323,124	297,362	480,671	294,709	522,916	2,160,796	506,744
Project Management	223,325		5,954	17,788	47,771	39,924	61,897	12,241	66,174	251,750	-28,425
Total (Actual)	4,689,815	0	98,609	342,975	825,088	609,384	816,176	667,441	841,000	4,200,674	489,141
Total (Cumulative Actual)		0	98,609	441,585	1,266,672	1,876,056	2,692,232	3,359,673	4,200,674		
Annual Planned Disbursement (from ProDoc)			772,731	1,135,313	958,688	898,026	925,057				
% Expended of Planned Disbursement			13%	30%	86%	68%	88%				

[22] Includes expenditures in November-December 2015
[23] Up to 30 September 2022

Table 3: FSM R2R Expenditures by ATLAS Code

ATLAS Code	Expenditure Description	Spent to date (US$)
71300	Local Consultants	158,830
71200	International Consultants	417,492
71400	Contractual Services – Individual	1,430,593
71600	Travel	376,802
72200	Equipment and Furniture	295,862
72300	Materials & Goods	243,476
72400	Communic & Audio Visual Equip	5,139
74200	Audio Visual & Print Prod Costs	64,937
74500	Miscellaneous Expenses	2,295
74700	Transport, Shipping and handle	21,026
76100	Realized loss	72
75700	Training, Workshops and Conference	321,588
72100a	Contractual Services - Companies / Nat	356,152
72800	Information Technology Equipment	22,063
64397	Services to projects -CO staff	445
64398	Services to projects -CO staff	116
74596	Services to projects	268
72500	Supplies	68,217
72600	Grants	351,683
73100	Rental & Maintenance-Premises	27,996
74100b	Professional Services - International	35,623
Totals:		**4,200,674**

Table 4: Co-Financing for FSM R2R Project (as of 30 September 2022)

Co-financing (type/source)	UNDP own financing (million USD)		Government (million USD)		Partner Agency (million USD)		Private Sector (million USD)		Total (million USD)	
	Planned	Actual	Planned	Actual	Planned	Actual	Planned	Actual	Planned	Actual
Grants									0.000	0
Loans/Concessions									0.000	0
• In-kind support			11.386	15.510	6.500	7.022			17.886	22.532
• Other									0.000	0
Totals	0.000	0.000	11.386	15.510	6.500	7.022	0.000	0.000	17.886	22.532

Table 5: Actual FSM R2R Co-Financing (as of 30 September 2022)

Type of partner	Co-Financing Partner	Type of Co-Finance	Planned (US$)	Actual (US$)
National Government	Department of Environment, Climate Change and Emergency Management, FSM	In-kind	1,000,000	2,499,145
Local Government	Department of Resources and Development, FSM	In-kind	1,000,000	917,322
Local Government	Kosrae Island Resources Management Authority	In-kind	2,100,000	3,276,182
Local Government	Chuuk State Government	In-kind	2,700,000	3,325,911
Local Government	Department of Resources and Development, Yap State	In-kind	1,686,398	2,785,429
CSO	Micronesia Conservation Trust	In-kind	5,000,000	3,000,000
CSO	Micronesia Conservation Trust	In-kind		2,000,000
CSO	The Nature Conservancy	In-kind	500,000	677,665
CSO	The Nature Conservancy	In-kind	1,000,000	1,344,117
Total Co-financing			**$17,886,398**	**$22,531,920**

3.2.1 M&E Design at Entry and Implementation

69. The ProDoc does provide for an M&E design on pages 112-114 in the ProDoc. The design is presented in a fairly generic manner, similar to other M&E designs from other GEF projects, and with preparations for a detailed M&E plan left to the implementation phase of the Project. Moreover, in terms of budgeting for M&E activities, US$148,000 was the total M&E budget (as broken down on pages 115-116 of the ProDoc) for a number of "output indicators". Given the disconnect between indicators and outputs (Para 38), the "Measurement of Means of Verification for Project Progress on *output and implementation* on Table 17 in the ProDoc should read "Measurement of Means of Verification for Project Progress on ~~*output and*~~ *implementation."* As such, the M&E design is rated as ***moderately satisfactory***.

70. In terms of M&E plan implementation, the Evaluator had access to progress reports from 2016 to 2022 which were informative in terms of the progress made on various studies, actions taken by the Project, and extra activities in collaboration with other donors. The progress reports from 2020 to 2022, however, were based on new reworked SRF indicators that propose new EOP indicators and targets as recommended by the MTR. Other activities with M&E include:

- the monitoring of social and environmental safeguards was adequate. However, there was no attempt made to develop a ToC despite the MTR recommending ToC construction. A ToC has been developed by this TE on Figure 1;
- PIR ratings being consistent with the MTR with most recommendations having a management response to deal with the issue;
- the prominence of the SC's role in M&E activities with the National Technical Coordinator making a detailed presentation on progress of the Project using the SRF;
- the GEF OFP being kept informed of M&E activities with gender perspectives of M&E involved.

71. This is also an opportunity to comment on the METT. While FSM has their own Tracking Tool, the MPAME, for Protected Areas which is favored by all FSM stakeholders, the METT tracking tool was used instead because it was required by GEF, leading to questions such as "does your PA have facilities for tourists?" or "does your PA have staff to manage the facilities?" which is not appropriate for most of the PA sites in FSM, and where METT scores will always be low even though Project management does not think these PAs have been poorly managed as community-level management will always be effective. The advantage of the METT is that it obtains information on the PA and identifies lower scores and gaps to plan and prioritize activities. For example, low scores for enforcement lead to enforcement trainings, low scores for not having management plans lead to development of management plans, and low scores for demarcation lead to demarcation activities under the Project. The METT is a useful assessment tool for planning purposes and how well an intervention is managed if baseline and post-intervention METT scores are obtained though not all questions were relevant to the FSM situation as far as scoring management effectiveness.

72. As such, *M&E plan implementation is rated as* ***satisfactory***. Ratings according to the GEF Monitoring and Evaluation system[12] are as follows:

[12] 6 = HS or Highly Satisfactory: There were no shortcomings;
5 = S or Satisfactory: There were minor shortcomings,
4 = MS or Moderately Satisfactory: There were moderate shortcomings;
3 = MU or Moderately Unsatisfactory: There were significant shortcomings;

- *M&E design at entry – 4;*
- *M&E plan implementation – 5;*
- *Overall quality of M&E – 5.*

3.2.2 Performance of Implementing and Executing Agencies

73. The performance of DECEM (the Executing Agency) can be characterized as follows:

- The Project started slowly due to limited guidance from UNDP on relevant rules and procedures, but improved as staff familiarized themselves with requirements;
- DECEM effectively managed and administered the Project despite funding and administrative delays from the GoFSM and UNDP. This included an appropriate focus on results and timelines, appropriate use of funds for procurement and contracting of goods and services;
- DECEM prepared PIRs that provided adequate monitoring of SRF indicators, implementation progress, SESP risks, gender, knowledge management and communications, and stakeholder engagement;
- During the latter stages of the FSM-R2R Project, Project activities were accelerated;
- Overall performance of DECEM on the FSM-R2R Project can be assessed as being **satisfactory** despite the difficulties of managing and administering the Project.

74. The performance of UNDP (the Implementing Agency) can be characterized as follows:

- UNDP supported DECEM with administrative assistance and training throughout Project implementation to maintain the NIM, with the bulk of administrative work being performed by the PIU and DECEM;
- UNDP had difficult fund administrative policies to follow. An example was the quarterly tranche of GEF funds only made available from UNDP when a minimum of 80% of the funds from previous tranche have been spent, necessitating the time-consuming activity of liquidating GEF funds by the PIU;
- There is some appearance of UNDP reactively managing the work load of the Project:
  - UNDP has not provided any assistance or feedback on the contents of the PIRs for the past 3 years. With the Project team filling out all the fields in the PIRs, there was a lack of collaboration with the PIU on PIR preparations. With the RTA providing oversight of the PIRs, there were no consultations with Project staff on PIRs prior to their submissions[13];
  - UNDP delayed work on 2 RPAs, first taking several months to prepare RPAs, and then undertaking micro HACT assessments prior to MCT and BirdLife receiving their full RPA amounts in 2021-22 (Paras 91 and 124), subsequently delaying works;
- Overall performance of UNDP on the FSM-R2R Project can be assessed as being **moderately satisfactory**.

2 = U or Unsatisfactory: There were major shortcomings;
1 = HU or Highly Unsatisfactory
U/A = Unable to assess
N/A = Not applicable.

[13] In one instance, the Project team in the 2021 PIR was asking for more attention from UNDP. It was agreed by both sides to schedule bi-weekly calls. When the Project scheduled these calls, UNDP personnel were never available.

3.3 Project Results and Impacts

75. This section provides an overview of the overall results of the FSM R2R Project and an assessment of the relevance, effectiveness and efficiency, country ownership, mainstreaming, sustainability, and impact of the FSM R2R Project. For Table 7, the "status of target achieved" is color-coded according to the following color-coding scheme:

Green: Completed, indicator shows successful achievements	Yellow: Indicator shows expected completion by the EOP	Red: Indicator shows poor achievement – unlikely to be completed by Project closure

3.3.1 Progress towards objective

76. With the overall objective of this Project being to "strengthen local, State and National capacities and actions to implement an integrated ecosystems management through "ridge to reef" approach on the High Islands of the four States of the FSM", a summary of achievements of the FSM R2R Project at the objective level is provided with evaluation ratings on Table 6. The GEF Tracking Tool for the FSM R2R Project is contained in Appendix E.

77. With regards to the "*area of High Islands of the FSM where pressures from competing land uses are reduced (measured by no net loss of intact forests) through the implementation of Pohnpei IEMP, Kosrae Land use Plan, Weloy (Yap) and Sapo, Oror and Ununo (SOU, Chuuk) Stewardship Plans*", a Strategic Environmental Assessment (SEA) and an IEMP were necessary to cover ridge to reef environmental issues considering there were no existing plans that integrated issues of land and reef (involving water and fisheries) and that it was not realistic to have a SEA conducted for the entire FSM, as outlined in the SEA Scoping Study Report. For example, Kosrae has a land use plan and a fisheries management plan but nothing to integrate environmental land and fishery issues. A SEA and an IEMP was intended to look at how the land impacts the fishery and vice versa. The challenge for the Project was how to formulate the SEAs and the IEMPs with the state governments, all of who have different land tenure issues and differing styles of government. A decision was made on the Project to have separate SEAs and IEMPs for each state.

78. The Project target of developing and implementing 4 IEMPs, covering 62,133 ha, was deemed to be far too ambitious. This was highly unlikely to be achieved due to the costs and complicated land tenure system in the FSM where in Yap and Chuuk, majority of lands are community owned and managed. A decision was made by UNDP and GoFSM in 2018 to select only one State to undertake the SEA. As such, Project resources were used to prepare SEA report and the IEMP for Pohnpei State for implementation in 2018. These documents were to serve as models for replication in the remaining three States. The Pohnpei SEA and IEMP reports required collaboration with regional, National and Pohnpei State agencies (such as the EPA) and NGOs to collect and verify the Pohnpei State terrestrial and marine baseline with available data. This included 2008 vegetation maps and mapping of development activities and engaging with DECEM's GIS expert for assistance through the SEA process. Furthermore, the FSM's intact forest cover was estimated at 6,213 ha . As of 30 June 2020, the Pohnpei IEMP was finalized towards development, revision and implementation with Pohnpei State calling for the establishment of a coordination unit and awareness raising.

79. This catalyzed SEA and IEMP activities in other states:

- A revision of the 2003 Kosrae Land Use Plan (KLUP) and a SEA report were prepared between 2020 and 2022 that took into account all development plans of Kosrae, as well as Kosrae's strategic development plan, disaster plan, coastal management plan, and other supporting plans. Unfortunately, COVID-19 travel restrictions prevented consultants from completing the reports. With the original consultant's contract terminating before final comments were provided, the documents remain in the final draft stage, likely to be finalized and approved by the Kosrae Island Resource Management Authority (KIRMA), a primary implementing agency. The Project is also providing support through the contracting of a local consultant to assist KIRMA in this matter through November 2022. Although the revised KLUP is not yet final, many of the actions within the plan are being implemented;
- An MOU for the implementation of priority activities within the Sapo, Oror and Ununo (SOU) Forest Stewardship Plan (FSP) in Chuuk was signed, with implementation of activities commencing from July 2020 to June 2022. The intention of the SOU-FSP was to reduce competing pressures on land use within the site, which included restoration planting in the upland forest, demarcation of the conservation area, and well rehabilitation. The time taken to implement these plans was enormous due to shortage of staff, administrative turnover and COVID-19. Though an SEA was not done for Chuuk, the Chuuk Women's Council (CWC) started a watershed protection and agro-forestry project on the Nefo watershed in 2021 with the intention of replicating this experience in other watersheds. Approach taken was bottom-up where landowners and the mayor's office were consulted prior to the plantations[14]. This resulted in sustained communities sustained relationships with assistance from the communities and contractors to help with the plantations. Despite the plants, in particular taro, not growing properly because of drought and too much rain, the community and CWC adapted by planting coconut trees during droughts. CWC overcame difficulties with the national government on supply procurement and payments to contractors by fronting funds with government reimbursing CWC at a later date;
- In Yap, priority activities within the Weloy Forest Stewardship Plan (FSP) were implemented from 2020 to November 2022 that included included signage, upland forest rehabilitation, and streambank restoration. An agroforest assessment was also completed in 2022 for Weloy, which was a priority activity for Yap's chapter of the FSM Forest Action Plan. The Weloy FSP was also reviewed, revised, and endorsed in 2022 through a rigorous consultative process. In addition, the Tamil Watershed area was added as a PA site, and implementation of the plan included similar activities (i.e., rehabilitation, awareness, agroforest assessment). Though a full SEA was not done for Yap, an assessment of terrestrial resources was conducted for the Forest Action Plan, and the R2R Project carried out a 'mini SEA' desktop review of National and State level plans and policies to help guide management plans at the state and community levels.

80. Through consultations with relevant stakeholder agencies in-country, a 10-year FAP for the FSM was also updated and approved in 2021, identifying FSM forest and land management trends and strategies, and serving as the over-arching forest management plan for all 4 states through mandated FSM government agencies. While not a Project-initiated activity, the update was carried out with support from Project team members, partners and stakeholders, and led by the FSM Department of Resources and Development. With each state with its own specific strategies, the 10-year FAP prioritizes development and support of community-based and Project-supported FAPs and identifies

[14] Prior plantation projects had the plantations done without local consultations resulting in plants being uprooted.

Table 6: FSM R2R Objective-level achievements

Project Strategy	Performance Indicator	Baseline	Target	Status of Target Achieved	Evaluation Comments	Rating[15]
Project objective: *To strengthen local, State and National capacities and actions to implement integrated ecosystem-based management through "ridge to reef" approach on the High Islands of the four States of the FS.*	Area of High Islands of the FSM where pressures from competing land uses are reduced (measured by no net loss of intact forests) through the implementation of Pohnpei IEMP, Kosrae Land use Plan, Weloy (Yap) and Sapo, Oror and Ununo (SOU, Chuuk) Stewardship Plans	0 ha 6,213 ha (10% of total area)	62,133 ha (covered by ILMPs) 6,213 ha	62,133 ha 6,213 ha	See Paras 77-81	4
	Average of METT Scores for 40 target PAs covering 24,986 ha and 20 priority PAs covering 31,877 ha	55%	65% with no drop in scores in any of the individual PAs	67%	See Para 82	5
	Sustainable Land Management Capacity Development Score for FSM	56%	75%	71%	See Paras 83-85	4
	PA Management Capacity Development Score for FSM	50%	70%	75%	See Paras 86-88**Error! Reference source not found.**	5
	% of the FSM population, MPA communities, benefitting in the long term from the sustainable management of the fisheries resource which includes providing adequate refugia for sustaining the resource management of fisheries resources.	Unknown	20%	84% of households currently benefitting 98% communities will benefit in the long term	See Paras 89-9189**Error! Reference source not found.**	4

[15] Ibid 12

the need for updated maps (something beyond the scope of the Project but noted as a priority for the FSM). The Project also supported implementation of other strategies identified in this plan including the National/State level Biodiversity Strategic Action Plans (BSAPs) that included rehabilitation, revitalization of cross-sector working groups, and carrying out the economic valuation of agroforest in Yap State.

81. Through consultations with relevant stakeholder agencies in-country, a 10-year FAP for the FSM was also updated and approved in 2021, identifying FSM forest and land management trends and strategies, and serving as the over-arching forest management plan for all 4 states through mandated FSM government agencies. While not a Project-initiated activity, the update was carried out with support from Project team members, partners and stakeholders, and led by the FSM Department of Resources and Development. With each state with its own specific strategies, the 10-year FAP prioritizes development and support of community-based and Project-supported FAPs and identifies the need for updated maps (something beyond the scope of the Project but noted as a priority for the FSM). The Project also supported implementation of other strategies identified in this plan including the National/State level Biodiversity Strategic Action Plans (BSAPs) that included rehabilitation, revitalization of cross-sector working groups, and carrying out the economic valuation of agroforest in Yap State.

82. With regards to "*average of METT Scores for 40 target PAs covering 24,986 ha and 20 priority PAs covering 29,623 ha*", the 20 priority PAs was added as a national sub-target following the MTR recommendations. With the Project able to meet its objective-level EOP target of 65% for 40 PAs with 67%, a new approach to this indicator was designed to capture 20 PAs of which there were 7 new active sites which the Project has been working with since 2017 and deemed to most likely achieve the METT target of 65% at the conclusion of the Project. Difficulties were experienced in increasing METT scores for the Project's Protected Areas due to the 40 PAs spreading across the 4 States with only 1 to 2 agencies available in each State to assist communities in management plan development, monitoring and enforcement, and managing the lengthy amount of time required to officially establish a PA site, all while knowing that the Project is not actively implementing management regimes across all 40 sites simultaneously. This new indicator and target progressed as follows:

- As part of the TE, METT scores were measured from August-October 2022. With the majority of the PA management plans being community-based, the Project is only able to advise and support with management decisions ultimately left to the community. As recommended in the MTR, the Project shifted its focus to 20 priority PA sites (7 new sites and 13 original sites) that have the most active and willing community involvement, while continuing to lend support to the original 27 PAs, totaling 47 PAs. The updated METT scores at TE were 67% for the original 40 PA sites, 80% for the 20 priority PAs, and 69% for 47 PAs. Sub-activities under Component 2 (such as procurement of marine monitoring equipment and enforcement training) were selected based on careful review of METT scores and management plans to fill gaps and build capacity. Activities, all of which take an enormous amount of time include:
    - Development/updating and completion of PA management plans;
    - Implementation of management plans, which includes demarcation of PAs, building capacities through enforcement trainings, procurement of equipment, and implementation of learning exchanges; and
    - gazetting of PAs that are still pending the endorsement process;

- In Yap, progress includes development of a new management plan for Gachpar community endorsed in 2021, updating and endorsement of the Weloy Forest Stewardship Plan in 2022, updating of the Riken MPA declaration in 2022, with Riken combining its original and new MPA areas into one area under one draft management plan, and securing additional new sites through outreach on PAs with communities. Activities within 2018-2022 focused on increasing METT scores of the island's 9 PAs through management planning to support development updates and implementation of management plans in Yap, and the demarcation of PA sites in Yap;
- In Chuuk, there has been focus on raising awareness around its newly endorsed PAN Law and development of accompanying regulations; translating an existing management plan for the Onei community into the local language; mangrove rehabilitation; and developing a moratorium to seize the commercial sale of mangroves. Activities within 2018-2022 focused on increasing the METT scores in Chuuk's 11 PAs included protected area enforcement trainings for community and law enforcement officers, and demarcation of PA sites in Chuuk. Chuuk also developed, endorsed and implemented three new PA management plans for Witipon, Kuop, and Soponoch, and implemented the SOU Forest Stewardship Plan;
- In Pohnpei, there was focus on participatory awareness for the Kitti Watershed Forest Reserve in 2018, resulting in a signed MOU between the Pohnpei State Government, Kitti Municipality and traditional leaders for the demarcation of the watershed boundaries. Planning activities with the Sokehs community on the Palikir Pass management plan were completed in 2019, with objectives and activities identified by the community. Activities within 2018-2022 focused on increasing METT scores of the island's 16 PAs through demarcation of MPAs and annual learning exchanges for communities engaged in PA management;
- In Kosrae, there has been work towards enacting the Walung MPA through PA legislation after the management plan was endorsed by the community in 2022. Malem officially endorsed the Pikensukar-Yeyeis MPA management plan in February 2018, and also conducted socio-economic surveys in 2022 to further update it. Additionally, Kuplu completed its management plan in 2020 and legislation is also pending for gazetting. Tafunsak had its legislation updated a few times, most recently in 2021 to clarify the PA boundaries/size. Mahkontowe completed a management plan in 2017 and was gazetted through legislation. The Project has supported implementation of its plan such as tour guide training. Further, Lelu's management plan was completed in 2019, and the project support implementation via development of a clam farm. Activities within 2018-2022 focused on increasing METT scores of the 11 PAs in Kosrae through PA enforcement trainings for community and law enforcement officers, and management planning to support development of management plans.

83. With regards to the **"***Sustainable Land Management Capacity Development Score for FSM*", Project resources were used to build capacity for all 4 States starting in 2017. In 2018, the States also revisited the SLM and PA capacity development scorecards for each state to update the scores based on state capacities and identify priority capacity building activities for implementing partners. By February 2019, the Project completed and validated the Capacity Needs Assessments for each of the 4 States showing an average SLM score of 56% across the FSM, a rise of 1% against the baseline of 55%[28].

[28] At the MTR, the Project validated the SLM/PA capacity scorecards for each of the States. The 1% increase triggered the need for the PIU to further examine the scorecards, resulting in the finding that the baselines and targets for the SLM and PA capacity scorecards in the SRF were switched. At MTR, these were corrected.

84. As of June 2020, baseline target errors were corrected as instructed by the MTR with the SLM scorecard for the Project remaining at 56%. Efforts to improve the SLM scorecard are still ongoing up to 30 June 2022 and included:

- finalizing Pohnpei's SEA Report and IEMP, which presents actions needed to monitor the trends of Pohnpei's environmental concerns and steps required to mitigate against the negative impacts, and development of lessons learned to inform future SEAs in the FSM;
- finalization of the Kosrae SEA report, update of the 2003 Kosrae Land Use Plan, and development of lessoned learned to inform planning for future SEAs for the remaining two States;
- implementation key priorities within the Weloy Forest Stewardship Plan; and
- endorsement of a MOU for the implementation of the SOU Forest Stewardship Plan, and implementation of the SOU FSP.

85. Challenges to improving the capacity development scorecard included the mismatch between staff skills and job requirements, lack of motivation at work, making the target of 75% difficult to achieve. Notwithstanding that a 71% METT score was achieved, the Project provided focus on areas that were likely to increase, while also providing a series of recommendations for improving the capacity of institutions responsible for land use planning. There were, however, areas within the scorecard which are outside the control of the project such as in Yap and Chuuk where almost all land is privately owned and management by government or agencies is limited. Though an analysis was done in June 2020 on the SLM scorecard (via consultations with key project partners) that projected the highest potential score will be at 61%, a 71% METT score was achieved by October 2022, still 4% short of the project target of 75%.

86. With regards to the "*PA Management Capacity Development Score for FSM*", Project resources were used in 2019 to revise the PA scorecard which indicated an average of 50% for all 4 States. This was attributed to the Project's efforts to increase PA enforcement trainings in Chuuk; demarcation of PAs in Chuuk and Yap; sharing of best practices in Pohnpei through learning exchanges; and endorsement of PA legal frameworks at National and State level to guide management effectiveness of PAs.

87. In 2020, baseline target errors were corrected as instructed by the MTR with the PA scorecard were reduced from 55% to 50%. Efforts to improve the PA scorecard are still ongoing up to October 2022 and included:

- approval of the criteria in the Yap Community Action Program (YapCAP) PAN Policy by the YapCAP board in March 2022. Yap had PAN regulations that were developed within the Project timeframe and endorsed by the Executive branch; however, the Yap Legislature did not file them with the opinion that since all resources are privately owned, the Yap Government could not recognize PA sites. Once endorsed at the community or traditional level, they are considered gazetted. The Yap PAN office was moved under YapCAP, and the PAN criteria developed by the Yap PAN Coordinator was included in the YapCAP PAN Policy;
- a completed review of a draft PAN regulation for Chuuk State in December 2021 which was sent to the Chuuk state legislature for approval. Delays in the preparatory process were experienced due to sporadic availability of volunteer legal assistance, and the Project contracted a local consultant to help facilitate in 2021;
- ongoing updating of Pohnpei's existing PAN law and development of complementary regulations. The Project recruited a local legal consultant in June 2022 to develop draft

accompanying regulations, which was finalized in October 2022. The legislation will be phased over to Pohnpei Department of R&D for final approval from the Pohnpei State Legislature;
- completion of Kosrae's PAN fund legislation, awaiting endorsement since 2021, and the updated Kosrae PAN legislation, the final draft of which was completed in November 2022 and will be phased over to KIRMA for endorsement by the Kosrae State Legislature;
- a draft FSM PAN Operations Manual (OM) which was finalized in July 2022. The preparation of the OM was supported by an international consultant in 2020, and by local and international consultants in 2022 to lead the review and finalization of the OM by the FSM Department of Resources and Development and to develop state-specific chapters describing PAN operations. The Project's contribution is complete with the remaining steps to be phased over to R&D, as identified in the Project's exit strategy. The OM is understood to be a living document and subject to future revisions.

88. A PA management capacity score was at 75% in October 2022. While some actions required are outside of the Project's control (such as institutionalization in government agencies), PA systems vary across the 4 FSM states with the majority of PA sites being community owned and managed. Nonetheless, the project still achieved well above (5%) its target of 70%.

89. With regards to the "*% of the FSM population* benefitting in the long-term from the sustainable management of the fisheries resource which includes providing adequate refugia for sustaining the resource*", there were difficulties in determining the baseline given that the 20% target is based on a fisheries study conducted for Pohnpei State only. Furthermore, even if a comprehensive study was conducted to determine the actual baseline, there were still restrictions around changes that could be made to targets at objective level. Therefore, the indicator and baseline were modified to ensure the 20% target could be met. There are multiple community-based activities taking place simultaneously in each State, ranging from PA activities providing assistance in the development of fisheries management plans in Kosrae to the deployment of Fish Aggregation Devices in Yap in 2018; both activities aim to reduce harvesting pressure on inshore fisheries.

90. In September 2019 after the MTR, this indicator was modified to focus on MPA communities rather than the overall FSM population:

- baseline data was changed from "0" to "unknown" to reflect that despite the FSM population benefiting from long-term sustainable management of fisheries resources, there is a lack of information to confirm the baseline data; and
- the target of 20% applies to only the MPA communities. The original 20% target was based on Pohnpei's fishermen population. Progress against baseline data with qualitative data was made in 2021-2022 socio-economic surveys and was used to help determine benefits flowing into communities from the Project's PA activities. Survey results show 84% of MPA communities are currently benefiting.

91. In August 2021, the Micronesia Conservation Trust (MCT) via an RPA with UNDP, led efforts to determine the percentage of FSM MPA communities benefitting from sustainable management of fisheries[29]. They did so by surveying representatives through focus group discussions at PA sites in all 4 States via a rapid assessment questionnaire (using guidelines from the Micronesia Challenge

[29] MCT hosted the socio-economic lead for the Micronesia Challenge initiative, a regional goal to effectively conserve 50% of marine resources by 2030. This will ensure that any surveys or tools used will align with existing methods.

socio-economic methodology and SEM Pasifika guidelines within the remaining Project period of 2021 and 2022); this determined how MPA communities are benefitting[30]. Payments were delayed to MCT pending the Project's extension request, and UNDP's requirement for MCT to undergo a micro HACT assessment prior to MCT receiving the full RPA amount[31]. This resulted in the ongoing collection of household survey data for a site in Pohnpei to provide a more in-depth example from one site to compare against the PA rep survey results (ideally, an FSM wide census, or household surveys for all MPA communities would have been done). Focus groups of PA reps were surveyed, with inherent biases since PA representatives were likely to be more involved and more positive toward PAs than general community members. As such, the percentage of FSM MPA communities benefitting from sustainable management of fisheries, as demonstrated by the PA representatives surveyed, can be characterized as follows:

- 84% of MPA communities are currently benefitting
- 98% of MPA communities felt their communities would in the long-term.

92. Overall, the achievement of objective level targets is rated as **moderately satisfactory** with the issues being:

- the unrealistic targets that were set on the original SRF with revisions being provided with achievable targets. Furthermore, the METT score targets were very subjective;
- the METT scores all trending in a positive direction even though some did not reach their target;
- achievement of all of the revised targets, except for the SLM capacity development score.

3.3.2 Progress towards Outcome 1: Ecosystems Management and Rehabilitation on the High Islands of the FSM to enhance Ridge to Reef

93. To achieve Outcome 1, a summary of achievements of the Outcome is provided with evaluation ratings on Table 7.

94. With respect to "*Number of Integrated Environmental Management Plans (IEMP) and Forest Stewardship Plans (FSPs) being implemented*," Project resources were used to:

- draft an SEA and an IEMP in Pohnpei State that started in 2018 and was finalized on 28 June 2019 pending endorsement by the Pohnpei State Government that has been delayed primarily by the COVID-19 pandemic. The IEMP is an integrated plan that highlights and coordinates actions and strategies identified in other National and Pohnpei state plans. The primary focus now is to phase over the IEMP to relevant Pohnpei government agencies as outlined in the Project's exit strategy. Many activities are already being implemented by agencies mandated to carry them out;
- implement the FSP for Weloy, in Yap State, through tree planting and streambank restoration, household survey data collection, field assessment and analysis of Weloy's agroforest, an activity identified in Weloy's FSP and prioritized in the Yap State chapter of the FSM Forest Action Plan.

[30] MCT has noted that it was not be feasible to fully determine the percentage of the FSM population benefitting or within all MPAs, since that would have required a census, which the FSM had originally scheduled for 2020 but was postponed due to the COVID-19 pandemic.

[31] UNDP was slow to advise on the RPA modality, then slow to issue the RPA, and the 1st payment was delayed for unknown reasons before the additional delays waiting for the Project extension, subsequent to the RPA extension and micro HACT.

Table 7: Progress on Outcome 1-level achievements

Project Strategy	Performance Indicator	Baseline	Target	Status of Target Achieved	Evaluation Comments	Rating[32]
Outcome 1: Ecosystems Management and Rehabilitation on the High Islands of the FSM to enhance Ridge to Reef Connectivity	Number of Integrated Environmental Management Plans (IEMP) and Forest Stewardship Plans being implemented	0 draft Integrated Environmental Management Plan for Pohnpei and Kosrae State; Stewardship Plans for Chuuk and Yap yet to be implemented	IEMP for Pohnpei State finalized and implemented, and providing a model for further replication in other States and Pacific Island Countries. Update and implement Kosrae Land Use Plan Implement at least 2 activities under the Weloy and SOU Forest Stewardship plans.	In Pohnpei, SEA and IEMP was finalized on 30 June 2022 pending endorsement by the Pohnpei State Government. Notwithstanding, many activities are already being implemented. In Yap, the original Weloy FSP was implemented with activities completing in August 2020 and June 2022, respectively, and a revised FSP was finalized in April 2022, with installation of signage completed in November 2022. In Kosrae, the final draft of the KLUP was completed in October 2022 and will be phased over to KIRMA, but implementation is ongoing with Kosrae agencies. In Chuuk, implementation of SOU FSP priority activities has been completed, with implementation being led by the Chuuk Conservation Society (CCS)	See Para 94	4
	Revival of cross-sector working group for integrated landscape management	0 cross-sector working groups	Revival of Pohnpei Resource Management Committee, Utwe & Malem resource Management Committees, Yap Environmental Stewardship Consortium and Chuuk Environmental Working Group	Revival of Utwe and Malem RMCs completed in 2020. Formal establishment of the other three State-level cross-sector working groups was delayed due to COVID-19 and changing administrations, resulting in changing plans which included preparation of Strategic Action Plans (SAPs), which were completed for Pohnpei, Chuuk and Yap with TACs transitioned at the EOP to their respective cross-sector groups during their final TAC meetings.	See Paras 095-96126	4
	Annual Government and Donor funding allocated to SLM	US$ 9.2 million	At least US$ 10.1 million	US$22.5 million co-financed cumulative in 2022	See Para 97	5

[32] Ibid 12

Project Strategy	Performance Indicator	Baseline	Target	Status of Target Achieved	Evaluation Comments	Rating[32]
	(including PA management costs)					
	Extent (ha) of ecosystems rehabilitated resulting in increased delivery of ecosystem and development benefits: (i) Upland forests (ii) Mangroves & Wetlands	(i) 0 hectares (ii) 0 hectares	(i) 30 hectares (ii) 20 hectares	(i) 59.27 hectares of upland forests were rehabilitated (cumulative); (ii) 27.53 hectares of mangroves & wetlands were rehabilitated (cumulative).	See Paras 98-103	5
	% of piggeries using the dry litter piggery system within targeted catchments resulting in increased water quality	Pehleng [0%] Dachngar [0%] Tofol-Mutannanea [0%]	100%	DLPs were constructed and operational in Kosrae, Pohnpei and Yap as per targets. Chuuk changed its strategy to implementation of sedimentation control activities.	See Paras 104-108	5
	Maintained/increase water quality in target catchments through measurement of E. Coli (Pohnpei, Kosrae, Yap) and sedimentation (Chuuk).	Pehleng E. Coli baseline] Dachngar [E. coli baseline] Tofol-Mutannanea [of E. coli baseline] Chuuk [sedimentation rates baseline]	Decrease of E. coli concentration from the baseline [Yap approved] Chuuk: decrease from sedimentation rates baseline	Water quality monitoring results in Pohnpei and Yap have completed, showing slight improvements in the water quality per site in each State. No water quality technician in Kosrae, therefore, water quality could not be assessed. No results on Chuuk's sedimentation monitoring due to the COVID-19 pandemic	See Para 109	4

The tree planting and restoration work concluded in August 2020, while the agroforest assessment was completed and reported back to the community in June 2022. The Project also facilitated the review and update of the Weloy FSP, which was endorsed by the community in April 2022. Activities implemented for the revised Weloy FSP include improvement of signages which were completed in November 2022;

- draft of the revised Kosrae Land Use Plan (KLUP) was developed, while implementation of key activities within the plan continued to progress. In April 2020, a local consultant based in Kosrae was recruited to coordinate and monitor the day-to-day SEA process in Kosrae, and to undertake the lead role in updating the KLUP. A final draft of the Kosrae SEA report, a draft revised KLUP, and a lessons learned report were completed by the consultants in December 2021. A COVID-19 border closure prevented consultants from getting timely remote feedback from Kosrae partners. Therefore, a local consultant was recruited to adjust the draft to incorporate feedback from relevant stakeholders. As of October 2022, the final draft of the KLUP and monitoring framework have completed and will be phased over to KIRMA. While the KLUP was being updated, implementation was ongoing according to Kosrae agencies mandates;
- implement key activities within the SOU FSP, in Chuuk State, which concluded in December 2021. Implementation was led by the Chuuk Conservation Society (CCS) under a contract with the Project to rehabilitate upland forest through tree planting, restore wells, and demarcate the site's boundaries.

95. With regards to "*Revival of cross-sector working group for integrated landscape management*", this indicator was revised post MTR at the request of each state to ensure that the State-level resource committees or Technical Advisory Committees (TACs) are in place after the EOP to tackle cross-sectoral issues for improved land and seascape management. Discussions for the working groups started at the R2R Planning Workshop in September 2019, for the formulation of the Yap Environmental Stewardship Consortium (ESC)[33], Chuuk State Environmental Working Group (SEWG), the Pohnpei Resource Management Committee (PRMC) and the Kosrae Resource Management Committee. Formal establishment, however, was delayed to due to COVID-19 and changing administrations, resulting in the Project changing plans by having each state preparing Strategic Action Plans (SAPs) internally or with the assistance of an on-island consultant. The State TACs are expected to transition into these cross-sectoral groups after the EOP of the Project.

96. The 4 Project TACs, however, continued to work with stakeholders in all States on the cross-sectoral working groups albeit with difficulties[34]. The status of cross-sector working groups for integrated landscape management in each state is as follows:

- In Yap, consultations with the traditional councils of chiefs were held on 30 June 2021, and a TOR drafted. In November 2021, a local consultant assisted in the development of a SAP for the Yap

[33] The Yap Environmental Stewardship Consortium was previously active during the development of the original Biodiversity Strategic Action Plan (BSAP); when the BSAP was updated in 2018, a priority was to revitalize the group. Yap completed its SAP for the ESC in 2022, and the TAC transitioned to the ESC during its final meeting in October 2022.

[34] All states resisted formalized TAC meetings due to local legalities that force agencies to meet. Notwithstanding, TAC meetings are still active and meet on a voluntary basis. The Project has hired consultants in 3 States to assist in the preparation of a strategic action plan (SAP) as a means of formalizing cross-sectoral working groups, the TACs. Status of the Yap and Pohnpei SAPs are complete. Chuuk SAP is in progress and targeted to complete by EOP. Kosrae did not have a TAC but smaller sectoral groups; an FSG that was funded by the Compact Agreement meets regularly as a municipal group that was also supported by the Project which the Project successfully revitalized. R2R Project helped to revive the Utwe and Malem RMCs, which is the target for Kosrae in the revised SRF. Kosrae wants a State-wide RMC, and is working towards that goal now by aiming to transition the TAC into the State RMC.

Environmental Stewardship Consortium (ESC). Yap partners were supportive of revitalizing the group as it is prioritized in the Yap Biodiversity Strategic Action Plan and Forest Action Plan Strategy. As of November 2022, the ESC has been established for Yap, with the first meeting date to be determined by the revitalized group;

- In Chuuk, stakeholders met and briefed the Governor in 2020 to secure his endorsement for the establishment of the Chuuk SEWG. The development of the SAP, however, was delayed due to the sudden departure of the PAN Coordinator, who had been taking the lead along with conflicting schedules of key officials and partners. In August 2022, a local consultant was recruited to assist with developing the SAP, in consultation with the TAC members. The final draft of the SAP was complete as of October 2022.
- In Pohnpei, partners and relevant agencies were briefed and expressed approval in 2020. However, under new leadership, stakeholders have shifted from revitalizing the PRMC (which is prioritized in their Biodiversity Strategic Action Plan) to revitalizing the Pohnpei Soil and Water Conservation District Board as their cross-sector group; the Board is already established in Pohnpei State Code, and is likely to be more sustainable. As of October 2022, development of the SAP was completed with assistance from a local consultant;
- In Kosrae, the Project revitalized municipal level RMCs in Utwe and Malem in 2020, completing the target for the Project. As an additional measure, Kosrae determined there was a need for a state level group. However, with no precedence of such a group, there was an expectation that the existing Kosrae Project TAC would be converted into their state level group with the addition of some RMC representatives. As a result of a 2022 Project-group learning exchange in Kosrae, Kosrae State also established a new Locally Managed Area Committee to bring together RMC and PA site representatives to support PAN related activities.

97. With regards to "*Annual Government and Donor funding allocated to SLM*", the target of US$10.1 million has been met with US$22.5 million co-financed cumulative to October 2022. This included:

- a 2018 Adaptation Fund worth US$1.0 million that focused on improving implementation of protected areas; strengthening enforcement of MPAs and near-shore fisheries regulations; building community level adaptive capacity to climate change; and improving knowledge management of PAs for livelihoods and conservation;
- approximately US$9.8 million that was sourced from local revenues including a 2019 initiative to expand the Project-funded dry litter piggeries in Kosrae;
- funding from Compact Sector Grants from the United States which was used to target environmental projects.

98. With regards to the "*Extent (ha) of ecosystems rehabilitated resulting in increased delivery of ecosystem and development benefits: (i) Upland forests (ii) Mangroves & wetlands*", the target was reduced after the MTR from the original target of 350 ha and 50 ha to 30 ha and 20 ha respectively; this was done to focus on developing and implementing monitoring protocols of rehabilitated sites that were restored during the initial years of implementation thus ensuring long term success. Additionally, the 350 ha and 30 ha targets were too ambitious considering the private land tenure on some of the islands requiring special permission for entry. As of November 2022, (i) 59.27 hectares of upland forests were rehabilitated (cumulative), and (ii) 27.53 hectares of mangroves & wetlands were rehabilitated (cumulative).

99. Issuing contracts for all work including tree and mangrove planting for rehabilitation of the ecosystem, was a challenge. Contracts as small as US$1,000 have to comply with UNDP and FSM government financial management procedures. This includes submission of an application and interest letter to government, and routing of the Contract to various departments within the national government for approval a process that takes a minimum of 6 weeks. Payments for the work done can also take a minimum of 4-6 weeks due to required evidence for completion of services such as sign-in sheets for consultations and final reports[35]. In addition, pre-planting and monitoring protocols and templates were developed, reviewed and approved by the states in June 2021, with some monitoring contracts signed for implementation towards the EOP to help ensure the success of rehabilitation efforts.

100. For sites in Yap, activities included:

- clean up of waste and pollution sources impacting critical ecosystems in 2018;
- the rehabilitation of two sites starting in December 2019 including the replanting of native species within the watersheds covering 6.16 ha in Tamil and 0.5 ha of upland forest in Weloy, 1.52 ha of wetland in Tamil, and the rehabilitation of the 115 m of the Okaw stream in Weloy. This included the restoration of its traditional retaining walls to control erosion and sedimentation runoff completed in August 2020[36];
- community members in Tamil expanded on the earlier upland forest watershed restoration efforts as part of the implementation of Tamil's Watershed Management Plan with an additional 2.46 ha planted. A total of 680 fire breaker trees were planted, with 321 fire breaker trees replaced, totaling 1,001 trees by June 30 2020[37];
- completion of the construction of a compost shed in October 2019 to support rehabilitation of degraded sites that included savannah lands and other critical sites. The compost facility was further expanded to include Dry Litter Piggeries, which completed in August 2020.[38] The shed is operated by the Division of Agriculture and Forestry (DAF) that uses waste from the dry litter piggeries for future tree planting efforts by the division to improve soil quality in savannah lands; and
- monitoring of areas restored in Weloy and Tamil by team leaders and NGOs in 2020, while post-planting monitoring occurred in 2022. Communities and partners underwent training on how to utilize the monitoring templates developed by the Project which was previously developed but not field tested.

101. For sites in Chuuk, activities included:

- rehabilitation of the upland Nefo Forest starting in 2018 with the Chuuk Women's Council. This included a baseline forest survey, completion of rehabilitation activities as of April 2020, and completion of the final report in February 2021 on rehabilitation activities documenting the number of plants and lessons learned;
- promotion of sustainable solid waste management practices in 2018;

[35] The Project has tried to hasten this process by having UNDP make payments via RDPs, but these can still take a few weeks. Contractors are often not able to work on the next deliverable until receiving payment for completed work. For example, if deliverable #1 is tree planting, a CBO will need to get paid for that prior to starting work on deliverable #2.

[36] Final Report for the Weloy Low Value Grant

[37] Final Report for the Tamil Low Value Grant

[38] Certificate of Completion Issued by the Yap State Department of Public Works and Transportation

- work to support mangrove restoration on the islands of Fefan and Oneisom by March 2020, including the establishment of nurseries, capacity building and alternative livelihood trainings to enable communities to manage the nurseries, while also learning other ways of generating income. Planting of the seedlings, however, could not take place due to COVID-19 gathering restrictions. When restrictions relaxed, many of the seedlings in the nurseries had already died due to the length of time, therefore, the Project engaged other community members as the original contacts were no longer available. Restoration for Oneisom ended up being cancelled as the majority of their nursery was lost and a reliable community team leader to carry out the restoration could not be found. In Fefen, mangrove restoration (that builds on the efforts of the SOU big tree/coconut restoration work) was finally completed in September 2022. The pace of this rehabilitation was affected by travel and gathering restrictions from the COVID-19 pandemic;
- the planting of 30 hectares of coconuts and 12 hectares of big trees and well restoration on Fefen as part of the SOU Forest Stewardship Plan implementation and coordinated by the Chuuk Conservation Society completed in December 2021. Demarcation and well restoration activities were also completed;
- monitoring efforts of the SOU rehabilitated areas including the mangrove restoration on Fefen that commenced in August 2022.

102. For sites in Pohnpei, activities included:

- delineation of the Kitti Watershed Forest Reserve starting in late 2019. Completion was delayed until October 2021[39] by the restriction of public gatherings due to the COVID-19 pandemic;
- planting of 1.6 ha of degraded mangroves in Lewetik and Sokehs in from February to June 2022. This activity was delayed mainly due to the absence of State project staff, limited technical support, and the COVID-19 pandemic;
- the Conservation Society of Pohnpei, through a Low Value Grant, carried out a baseline forest survey of rest clearing areas, including invasive species, and determined that the targeted sites in the upland forests of Pohnpei had naturally revegetated as of November 2021, precluding the need for further human intervention for tree planting;
- the Project working closely with the Pohnpei Division of Forestry to provide support for validation of the pre-planting mangrove restoration data. No post-rehabilitation monitoring using Project protocol had yet been disseminated although the template is being utilized by Pohnpei State Foresters to monitor previously rehabilitated sites not funded by the Project.

103. For sites in Kosrae, activities included:

- the Forestry and Invasive Unit within KIRMA completed an assessment in April 2019 on mangroves and wetlands to determine critical areas for rehabilitation;
- major rehabilitation of mangrove forests in early 2020 covering 16.56 ha of coastal areas;
- completion of the rehabilitation of an additional 9 wetland sites in February 2021 covering 7.2 ha;
- upland forest rehabilitation by community groups completed in November 2021 at 5 sites across the state, totaling 5.46 ha under the guidance of KIRMA Forestry Division and utilizing the Kosrae Conservation Safety Organization (KCSO) to distribute funds;

[39] Final Report for the Kitti Watershed Forest Reserve Low Value Grant

- KIRMA and Project staff completed post-planting monitoring in 2022 for 29.22 ha of rehabilitated sites.

104. With regards to "*% of piggeries using the dry litter piggery system (DLP) within targeted catchments resulting in increased water quality*," DLPs were constructed and operational in Kosrae, Pohnpei and Yap as per targets. Chuuk changed its strategy to implementation of sedimentation control activities. The baseline for piggeries was 0%, with no DLPs[40] within the Project site. Kosrae, Pohnpei and Yap committed to water quality improvements as a part of their sustainable land management practices by adopting DLPs to prevent direct pig waste effluent into streams used for bathing, drinking and recreation. With the Project not having the resources to convert all piggeries into DLP, they targeted areas with a high number of piggeries with willing communities to pilot DLPs.

105. Status of the dry litter piggeries in Kosrae is as follows:

- 4 farmers were trained in 2018 to pilot the dry litter piggeries, one in each of the State's four municipalities: Tafunsak, Lelu, Malem and Utwe. This decision was based on a water quality assessment, which indicated that all rivers within the 4 municipalities were highly contaminated. Construction of the 4 DLPs commenced in late 2019 and were completed in 2020;
- multiple efforts to promote the DLP system in Kosrae were conducted between July 2018 - June 2019 including workshops on the operation of DLPs, the use of compost fertilizers produced from DLPs, and construction of portable DLPs as a cheaper alternative to the regular DLPs;
- In 2021, in collaboration with the FSM IW Project piloted in Kosrae, 4 additional DLPs were constructed in Tofol-Mutunannea. All 4 DLPs were completed in early 2022.

106. Status of the dry litter piggeries in Pohnpei is as follows:

- there is a fair amount of runoff in Pohnpei streams. Ipwek and Awak catchments were the original project sites for piloting of the DLP, however, in 2019 Pohnpei State decided to switch to Pehleng. This decision was based on three key factors: 1) a water quality assessment was carried out in Pohnpei, classifying Pehleng as one of Pohnpei's most highly contaminated areas due to extreme levels of E.coli; 2) Pehleng has a high population of individuals with limited access to information on effective waste management techniques; and 3) Pehleng is one of Pohnpei's villages with a high number of pigpen owners;
- While construction of DLPs in Pehleng commenced prior to 2019, with supplemental funding from the US Compact Free Association, completion of the Project-funded DLPs completed in 2021;
- With a growing number of DLP owners in Pohnpei, the availability of woodchips for operation of the DLPs was becoming a concern due to limited availability of wood chippers. While Pohnpei has 2 previously donated chippers from the government of Japan, one located at Pohnpei State R&D's Division of Agriculture and the other with the FSM College of Micronesia's training farm, access to these equipment was difficult particularly for farmers in remote villages. As a result, the R2R Project procured 2 additional wood chippers in September 2021 to support the operation of its DLP's in Pehleng.

[40] Instead of hosing off pig waste from a cement pig pen or an open pen, dry litter bedding (such as dry leaves) is applied to waste and shovelled off to another site for composting which can then be used in gardens.

107. Status of the dry litter piggeries in Yap is as follows:

- there is runoff in Yap streams but not as intensive as those streams in Pohnpei;
- in 2019, the project completed a household survey in the Dachngar area to establish the project's baseline data for households with piggeries. Following the survey, outreach activities were conducted to (1) increase awareness in the community on the impacts of pig waste on water quality; and (2) leverage buy-in from community members for uptake of the DLP method;
- construction of DLPs commenced in 2019, with assistance from the Division of Agriculture and Forestry, which completed in June 2021.

108. Status of the piggeries in Chuuk is as follows:

- an assessment to determine the source of contamination within the Project site was conducted in February 2019. However, the report did not provide sufficient evidence to suggest that piggeries were the main pollution source for the site. As a result, there has been limited progress on DLPs in Chuuk mainly due to lack of water tests to support construction within the newly identified site;
- as an alternative activity, Chuuk attempted to implement sedimentation control activities in 2021 within targeted coastal sites rather than construction of DLPs. This decision was made after Chuuk raised a far bigger environmental concern related to pollution from poor management of solid waste. This was cancelled due to change in administration and priorities, and COVID-19.

109. With regards to "*maintained/increase water quality in target catchments through measurement of E. Coli (Pohnpei, Kosrae, Yap) and sedimentation (Chuuk)*," this indicator was added to the SRF to gauge the improvements in water quality resulting from DLPs, with each island having one certified water quality technician to monitor the sites[41]. A technician collected baseline results, but passed away before the final results could be collected in Kosrae at EOP; therefore, water quality could not be assessed. Water quality monitoring results in Pohnpei and Yap have been processed, demonstrating improvements in water quality[42]. Since Chuuk did not do DLPs, they focused on E.coli and sedimentation in their water quality monitoring programme through their EPA in late 2019-early 2020; however, the COVID-19 pandemic distracted all Chuuk personnel from the programme with no achievement on this indicator in Chuuk.

110. Overall, the achievement of Outcome 1 level targets is rated as **satisfactory** mainly due to most targets being achieved notwithstanding delays in payments.

3.3.3 Progress towards Outcome 2: Management effectiveness enhanced within new and existing PAs on the High Islands of FSM as part of the R2R approach (both marine and terrestrial)

111. For Outcome 2, Project resources were used to generate 4 outputs:

- Output 1.5: A National and State-level Legal and Institutional Framework have been established to improve management effectiveness of PA's;

[41] Water quality technicians have to undergo specific US EPA training for water quality monitoring.

[42] In Pohnpei, water quality results demonstrated slight improvement, with those originally not safe for recreational activities now deemed safe according to Pohnpei EPA standards. Similarly, in Yap, water test results also demonstrated improvements with decreased levels of bacteria as per Yap EPA standards.

- Output 1.6: The PAN of the High Islands has been expanded, and existing and new PAs of the have been secured through a review and upgrading of legal protection status (gazetting of all PAs);
- Output 1.7: Management authorities (state and community) of newly established PAs are equipped and capacitated in managing PAs;
- Output 1.8: Effective PA management practices have been adopted in existing and new PAs.

A summary of actual targets of Outcome 2 with evaluation ratings are provided on Table 8.

112. With regards to "*Coverage (ha) of statutory PAs in the High Islands*", this is a measurement of the effectiveness of Protected Area Networks (PANs) with legislative and regulatory frameworks that are in place to recognize PAs that are privately owned but community-driven for resourcing. The PANs scale-up efforts of PAs to more effectively seek resources as they are recognized by State governments, as opposed to an individual PA seeking resources[43]; standards and criteria are needed for funding PAs, hence, the formation of PANs.

113. Efforts were made prior to the Project to get each state to a level where there is clarity to the communities regarding what they need to do to tap into these funding resource networks. Much of this work originated with the Measures Group[44] within the Micronesia Challenge (MC), an initiative launched in 2006 by the leaders of FSM, the Marshall Islands, Palau, Guam, CNMI who all recognized the common climate challenges their countries were experiencing including threats to overfishing and development (Para 46). To evaluate the status and trends of the MC and numerous local-and-regional conservation efforts, a shared coral-reef and fisheries monitoring network was established in 2010. The original goal of the MC was to effectively conserve 30% of near-shore marine resources by 2020. These goals were updated and expanded in 2018 to effectively "manage" 50% of marine resources and 30% terrestrial resources by 2030 where consideration of "manage" was if the resources were in a PA. All 5 jurisdictions would then be able to tap into the similar resources to build a support network for marine and terrestrial monitoring.

114. The MC project set up an endowment meant to be a sustainable source of funding for this monitoring with the interest earned from the endowment serving as base funding needs for PAs. The FSM R2R Project's goal was to help prepare PAs to meet the qualifications for "gazetting" and subsequent endowment funding such as having a management plan, biological monitoring, clearly delineated boundaries, and a management unit.

115. The status of PAs from 2017 to 2019 are as follows:

- the interpretation of "gazetting a PA" is defined in Chuuk and Yap as any PA endorsed at the community level;

[43] For community PAs to have access to the MC endowment fund, certain criteria must be met. By setting up the PAN, the Project is not only helping communities with one of the key criteria they need to access the MC endowment, but they are also securing sustainability of PAs in the FSM.

[44] The Measures Group focuses on developing indicators and monitoring three key areas: Terrestrial, Marine, and Socioeconomic. The key method for terrestrial is to expand on the Forest Inventory Analysis, resulting in an online terrestrial web viewer. For marine, there is an online database with work led by Dr. Peter Houk out of University of Guam. For socio-economic monitoring, methods follow the SEM-Pasifika guidelines with the lead based out of MCT. There is also a capacity building network, PIMPAC, a young champion internship program, and a scholarship program aimed at supporting graduate students requiring them to return and work in Micronesia.

Table 8: Progress on Outcome 2-level achievements

Project Strategy	Performance Indicator	Baseline	Target	Status of Target Achieved	Evaluation Comments	Rating[45]
Outcome 2: Management effectiveness enhanced within new and existing PAs on the High Islands of FSM as part of the R2R approach (both marine and terrestrial)	Coverage (ha) of statutory PAs in the High Islands (i) PAs gazette status verified (ii) Marine (iii) Terrestrial (iv) Total	(i) Legal status of 0 (0 ha) PAs verified (ii) 3,154 ha (iii) 4,444 ha (iv) 7,598 ha	(i) Legal status of 40 PAs verified - 27 existing and 13 new gazette (ii) 14,953 ha (iii) 10,033 ha (iv) 24,986 ha	(i) Legal status of 31 PAs verified (ii) 26,909 ha marine PAs (iii) 9,579 ha terrestrial PAs (iv) 36,488 ha total	Paras 112-116	4
	Number of States having a fully operational PA management decision support system in place on which management decisions are based	0	4	All 4 states had operational PA management support systems in place as detailed in the FSM PAN Operations Manual	Paras 117-118	5
	Mean % of total fish biomass of (i) *Cheilinus undulates* (EN); and (ii) *Bolbometopon muricatum* (VU) across the States[46]	Chuuk: (i) 1.14% (EN) (ii) 0.22% (VU) Kosrae: (i) 1.52% (EN) (ii) 0.00% (VU) Pohnpei: (i) 5.2% (EN) (ii) 0.48% (VU) Yap: (i) 2.47% (EN) (ii) 4.70% (VU)	Stable or increasing mean % against baseline at each State	• Chuuk: (i) EN 3.18% vs target of 1.14%; (ii) VU 0.36% vs target of 0.22% • Kosrae: (i.) EN 2.40% vs target of 1.52%; (ii) VU 4.07% vs target of 0.0%; • Pohnpei: (i) EN 2.35% vs. target of 5.2%; (ii) VU 9.60% vs target of 0.48%; • Yap: (i) EN 2.56% vs target of 2.47%; (ii) 4.51% vs target of 4.7%. • Though targets, it comes with a caveat in that the results do not make sense	See Para 119-122	4

[45] Ibid 12

[46] Methodology and sample sites should be similar to those used by Peter Houk, Unpublished data from FSM Coral Monitoring Programs, University of Guam.

Project Strategy	Performance Indicator	Baseline	Target	Status of Target Achieved	Evaluation Comments	Rating[45]
	Mean Detection Rate of the following birds: (i) Kosrae: Zosteropscinereus (Kosrae White-eye) Endemic (ii) Pohnpei: Myiagrapluto (Pohnpei Flycatcher) Endemic (iii) Chuuk: Metabolusrugensis (Truk Monarch) Endangered (iv) Yap: Monarchagodeffroyi (Yap Monarch) Endemic (v) All States: Duculaoceanica (Micronesian Pigeon) Regionally endemic	(i) 1,846[47] (Baseline to be verified in year 1 of project) (ii) 0.79366 (iii) – (v) Baseline TBD in year 1 of project	Stable or increasing against baseline	The contractor, BirdLife, was granted an extension for work to be completed by 31 October 2022, and the final report due within 60 days	See Paras 123-124	4
	Number of knowledge exchanges via (i) lessons learned disseminated through State wide events and other regional platforms; and (ii) most significant change stories shared nationally and regionally.	0 1	2 4	2 4	See Paras 125-126	5

[47] Densities (Individuals / Km2) of bird species in mangroves and along an elevation gradient in tropical rainforest of Kosrae in July 1983 (Engbring et al., 1990) reported in Hayes, F.E. and Pratt, H.D. (unpublished manuscript) The Avifauna of Kosrae, Federated States of Micronesia, with Taxonomic Revisions of Endemic Taxa. Mean density calculated excluding the Mangrove habitats:

Species Name	Common Name	Mangroves	0–100m	100–200m	200–400m	400–600m	600-800m	MEAN
Zoster opscinereus	Kosrae White-eye	1,098	2,062	2,000	1,897	1,350	1,981	1,846

- the interpretation of "gazetting a PA" in Kosrae and Pohnpei is any PA endorsed through the legislative process;
- In Kosrae, the Mahkontowe management plan was endorsed in 2017, followed by the endorsement of the Pikensukar management plan in 2018, and Lelu management plan in 2019. These were completed in collaboration with the Kosrae Conservation and Safety Organization with support from the Project. In Pohnpei, the Palikir Pass management plan was signed in 2018. In Yap, the Reey MPA and the Tamil Watershed endorsed their respective management plans in 2016, followed by approval of the Weloy Forest Stewardship Plan in 2017, and the updated Nimpal MCA management plan in 2018 and Tamil MCA management plan in 2019. In Chuuk, the Oneisomw Fisheries Management plan was signed in 2017, with SOU Forest Stewardship Plan in 2018.
- in 2018, the Project worked with the MC, Micronesia Conservation Trust (MCT) and the Nature Conservancy (TNC) to verify legal status of existing PAs in the FSM;
- once the list was finalized, the Project was able to provide verification on legal status of the 27 existing PA sites as well as additional sites outside of the original identified 40 PAs for support by the Project;
- an additional 7 PA sites were added, for a total of 47 sites supported during the Project. After the MTR, support was targeted toward 20 priority sites.

116. By November 2022, there were 31 gazetted PAs out of which 26,909 ha is marine and 9,579 ha is terrestrial for a total of 36,488 ha, above the target of 25,166 ha. The PAs were officially established either by State law or declared by the landowners through municipal ordinances. The Project assisted this process by lobbying officials, setting up meetings to show the importance of the PA sites, and drafting the regulations and legislation. Substantive progress was made towards this target between 2019 and 2022. This included:

- Yap endorsing management plans for Gachpar MPA as a key requirement for inclusion in Yap's PAN, as per the Yap Community Action Program (YapCAP) PAN Policy approved in March 2022. The process started in 2019, but the community took until 30 June 2021 to provide a final review to ensure full ownership of the plan. In addition, the Weloy Forest Stewardship Plan, originally endorsed in 2017, was updated and endorsed in April 2022 after 19 consultative sessions. Overall, the Yap process of influencing local policies and management plans was significant in that help was offered to communities to align their plans to meet both the YapCAP PAN Policy criteria and state and national plans; this would allow communities to access national technical and fiscal resources[48];
- Chuuk created PAN legislation during the Project, and developed supporting complementary regulations. For Chuuk, since there is not a full legal framework for PAN legislation to recognize PA sites pending finalization of the regulations; if a community has officially endorsed a site, the PA site is considered 'gazetted' for the sake of this Project. The Project also prepared Local Early Action Plans (LEAPs) or management plans for Kuop, Witipon and Sopwonoch PA which were finalized with the support of a Project-funded local consultant, and endorsed in a joint ceremony in December 2021. The Chuuk Project team worked with communities to conduct consultations and gather background information to develop management plans for priority sites;

[48] The National PA framework is linked with State policies which is then linked with community work. Each of the 4 states came up with different approaches with how they came up with their own state policies and overall management approach. Yap State experienced challenges to get their State leadership to agree to the approach.

- Pohnpei began the gazetting process of the Peniou MPA and Awak Watershed Basin in 2020 that was slightly delayed into 2021 by the COVID-19 pandemic and pending approval of Pohnpei's updated PAN legislation. The Project is assisting with complementary regulations that go with the updated legislation. As a result, gazetting of Pohnpei PA sites was put on hold indefinitely, and is scheduled to be phased over to relevant agencies at the EOP;
- Kosrae's Awane (Lelu) MPA's Management Plan was endorsed in 2019, and fully gazetted through legislation in 2020. The Walung MPA's management plan[49] was endorsed by the community in March 2022, and was in the final stage of review by relevant agencies for legal gazetting as of November 2022. The state level process is tedious and requires multiple steps. There was training for the Kosrae Conservation and Safety Organization (KCSO) to assess the Walung MPA and the re-evaluated Tafunsak MPA, the latter which revised its legislation in 2021.

117. With respect to "*Number of States having a fully operational PA management decision support system in place on which management decisions are based*," all four FSM states had operational PA management support systems in place as detailed in the FSM PAN Operations Manual (OM) as of June 2022. Congress endorsed the FSM PAN Framework in September 2018 with the overarching challenge to operationalize the framework. This was overcome by the Project funding the development of the Operations Manual and engaging MCT, TNC, State Governments and partners to operationalize the PAN. The MCT through a separate grant recruited the State PAN Coordinators to support implementation of the FSM PAN in collaboration with the States[50]. With the FSM PAN OM being highly crucial to operationalizing the FSM PAN Framework, the Project completed a draft of the FSM PAN OM which was reviewed by the FSM Department of Resources and Development by June 2021 in providing guidance to communities, resource owners and municipalities on how to propose sites to the FSM PA network. In 2022, the Project contracted consultants to help develop state specific chapters for the FSM PAN OM. Final feedback was incorporated in June 2022, and the OM was approved by FSM R&D. Since the OM is a living document, it is scheduled to continue to be reviewed by partners and adjusted as needed to ensure it meets the needs of the state PAN offices.

118. Project consultants helped to finalize the PAN OM and develop state specific chapters to clearly define their respective PA management decision support systems. In each state, a fully operational PA management DSS led to progress in PAN laws. The Project supported additional progress related to PAN operationalization including:

- approval of the YapCAP PAN Policy in April 2022. Yap was slow to endorse its PAN support system due to legal complications. The Project made several attempts to support the development of legislation, and continued its work with partners to revise a draft proposed PAN law in an attempt to align it with the Yap State's Constitution (with the assistance of a law student from the University of Hawaii interning at the Yap State AG office). The Yap State Legislature still determined that any legislation would conflict with the constitution, and PAN regulations were instead revised. The Project and partners then supported development of such regulations, which passed the required public review period, and were endorsed by the Executive Branch. However, the Legislature refused to file them, and advised that community/traditional level recognition of PA sites should be sufficient, as resources are privately owned. Therefore, Yap is

[49] Under the Kosrae PA System Act/PAN law, all sites must have an approved management plan prior to undergoing the endorsement process by the legislative branch.

[50] The PAN Coordinators were also highly involved in the planning of FSM-R2R Project activities, and were able to request support needed to carry out their work. Most of the PAN Coordinators collaborate with the Project on all PAN activities for their states. MCT has covered their salaries with the majority of implementation through the Project.

currently not pursuing PAN legislation or regulations. Instead, the Yap State PAN Coordinator, with support from the Project, drafted criteria for sites to be recognized in the PAN, including having a community-endorsed management plan or declaration. The Yap PAN office and Coordinator were moved under the government supported NGO, the Yap Community Action Program (YapCAP), and the criteria were added to the YapCAP PAN Policy and endorsed in April 2022 by the YapCAP board. The Yap R2R Staff closely collaborated with the Yap PAN Coordinator during the Project;

- Chuuk signed a PAN law in October 2017 through the support of key partners such as MCT and TNC. By June 2021, development of complementary draft PAN regulations for the State of Chuuk had been developed and undergone review and revision with support from legal interns sourced through PIMPAC. The Project then contracted a local consultant to lead workshops to further review and revise Chuuk's draft PAN regulations. The final draft was phased over to the new Chuuk PAN Coordinator to help facilitate legislative endorsement. Chuuk Project staff worked closely with the Chuuk PAN Coordinators as much as possible, but efforts were impacted with the first PAN Coordinator having contract issues, being frequently off island, and then later departing. The new PAN Coordinator did not come on board until August 2022, and the Chuuk Project staff worked to ensure that she was given proper handover of all PAN related activities, including the aforementioned regulations;
- Pohnpei already had existing PA management systems in 2018 that include PAN laws which provide planning, management and regulation of PAs. By June 2020, Pohnpei State reviewed its existing PAN law to ensure consistency and alignment to the FSM PAN Framework. It has since gone through several revisions and is pending legislative approval. The Project contracted a legal consultant in 2022 to develop complementary PAN regulations, to be ready once the revised legislation is approved. The final draft regulations were completed on 19 November 2022 and was phased over to Pohnpei State R&D;
- Kosrae already had existing PA management systems in 2018, including PAN laws which provide planning, management and regulation of PAs. By June 2021, development of PAN fund regulations for Kosrae State were completed, and are pending approval by Kosrae Legislature. The Project supported a local legal consultant to update Kosrae's PAN legislation in 2022, and the final draft revised legislation was completed on 18 November 2022, and was phased over to KIRMA to facilitate endorsement by Kosrae Legislature. There was ongoing close collaboration between the state PAN coordinator and Project staff in Kosrae.

119. With regards to "*Mean % of total fish biomass of (i) Cheilinus undulates (EN); and (ii) Bolbometopon muricatum (VU) across the States*", most of the targets were met by June 2022 as shown in Table 8. However, the lead scientist said the indicator was flawed with using the methodologies as indicated in the ProDoc which were more suited to monitoring "occurrence" rather than "changes in biomass". State marine agencies continued to share the results as part of their regular awareness activities and presentations were given by the marine agencies during learning exchanges held in Kosrae, Chuuk and Yap in May 2022. In October 2022, results were shared during Pohnpei's annual cross-site visit learning exchange.

120. The Project explored several options to obtain relevant information such as seeking assistance from regional technical experts (for fisheries and coral reef monitoring) to verify baseline information and update the Project's data based on recently conducted studies. In October 2019, the PSC endorsed US$100,000 to supplement and piggyback onto the ongoing Coral Reef Monitoring (CRM) Program through MCT to collect new data on the mean percentage of total fish biomass for EN and VU across the four States. This final set of data was deemed necessary to re-evaluate the EOP target. In May

2020, the Project approved a Low Value Grant to allow MCT to initiate the necessary ground work within the Project's timeline. The collection of EN, VU and shark data was coordinated by MCT between July 2020 and June 2021 for the 4 states in conjunction with the regular coral reef monitoring efforts[51]. The Project continued to liaise with MCT to ensure management intervention is provided where needed.

121. However, the MCT, research team, and the lead scientist noted that the original indicators were flawed, compromising the target results that were not shared as an accurate representation of priority fish species biomass. For example, 0.00% of Bolbometopon muricatum (VU) exist in Kosrae. The timing of when such an assessment was conducted may affect the results of the study since reports indicate that such type of fish species exist in Kosrae. Baselines for these species need to be adjusted based on existing data; further specific studies, surveys, and assessments may need to be undertaken to verify some of this information. A more accurate representation of MPA performance and priority species status is detailed in the final report, and is based on occurrence of the target species by habitat type by state over time. Hence, though the targets have been met for this indicator, it comes with a caveat that the results as presented do not accurately reflect the status of the priority species, and the report should be referred to for more information.

122. The MTR identified that there was impressive work being conducted by private actors in Micronesia towards the development of alternative livelihoods such as clam aquaculture; this resulted in a recommendation for the Project to raise awareness of the practices and incorporate them as tools to be replicated in other states. The Project supported additional aquaculture training in Chuuk for community representatives, CSOs and government agencies to build their capacities in managing and maintaining clam farms. Through support from the College of Micronesia's Cooperative Research Extension (CRE), 115 clams were deployed in the Soponoch MPA to establish a pilot clam farm that is managed by the R2R Rangers. In Kosrae, a clam farm training was conducted for farmers and interested individuals in Lelu, which resulted in the placement of 1,000 clams in the MPA. This was a priority activity within the Lelu MPA management plan.

123. With respect to "*Mean Detection Rate of the following birds: (i) Kosrae: Zosteropscinereus (Kosrae White-eye) Endemic (ii) Pohnpei: Myiagrapluto (Pohnpei Flycatcher) Endemic (iii) Chuuk: Metabolusrugensis (Truk Monarch) Endangered (iv) Yap: Monarchagodeffroyi (Yap Monarch) Endemic (v) All States: Duculaoceanica (Micronesian Pigeon) Regionally endemic*," efforts to collect information on the mean detection rate of birds continued from February 2020 to August 2022. With the Project engaging BirdLife International in February 2020 (through a low-cost grant of US$100,000) to undertake Phase 1 of the FSM Bird Survey in Pohnpei and Kosrae, field work scheduled for April 2020 was delayed due to COVID-19. Despite this delay, desktop review of information continued. Collection of record observations from the previous 1983/1984 FSM bird survey was completed and entered into a database. Alternative methods using SongMetres (acoustic recording devices) were utilized to adaptively manage this situation, allowing partners on the ground to collect bird song recordings and send the audio files to Birdlife for analysis. This data was compared through plenty of trial-and-error to the 1983/84 data using acoustic recording devices as a part of their continued data collection across the FSM commencing July 2020. Some delays were experienced in this data collection due to issues with equipment, weather, field guide availability and

[51] With MCT coordinating and disbursing funds, the lead scientist directs, and the state agencies, NGOs, and communities collect the data

access permission. Data collection was eventually completed for Kosrae, Pohnpei and Yap with flash drive audio files sent to BirdLife in Australia for analysis (internet access for FSM is poor and expensive).

124. Phase 2 involved a BirdLife RPA that included data analysis and Chuuk data collection, which was delayed since BirdLife was required by UNDP to undertake a micro HACT assessment prior to receiving any further funds. With the micro HACT completed in July 2022, preliminary results were being reviewed for Pohnpei's data. With the data analyses and methodology having no precedence and being innovative, BirdLife had to test different ways of analyzing the audio files. In addition, the field work in Chuuk was delayed first due to slow disbursement of the 1st RPA payment, and did not commence until March 2022. It was temporarily put on hold while the Project was waiting for its extension approval and when BirdLife underwent the micro HACT assessment, and was then slow to resume due to limited availability of field guides (guides are required as land is privately owned), difficulty accessing sites via boats (inclement weather, equipment failure), rough terrain, faulty and stolen recorders, and community events such as funerals, and additional safety concerns due to increased threat of criminal activity at transect sites. Some field sites were excluded for these reasons as determined by the Chuuk TAC, and Chuuk concluded data collection in August 2022 having not been able to complete all transects before needing to send files for analysis. With the many delays outside of their control, BirdLife was granted an extension until October 31, 2022, and will submit their final report within 60 days as per the RPA.

125. With regards to "*Number of knowledge exchanges via (i) lessons learned disseminated through State wide events and other regional platforms; and (ii) most significant change stories shared nationally and regionally*", this is a new indicator added after the MTR to reflect Project efforts on knowledge exchange. Currently, the achievement is 2 lessons learned document and 4 most significant change stories as per target.

126. Currently, 2 lessons-learned publications, "Implementing a Strategic Environmental Assessment (SEA) in small Pacific islands: lessons learned from the FSM Ridge to Reef project in Pohnpei, Federated States of Micronesia" [52] and "Strengthening Protected Area Management through effective community participation in the Federated States of Micronesia: Lessons learned from the FSM Ridge to Reef project" were prepared with inputs from stakeholders and widely disseminated in May 2021 and August 2022 respectively. The authors of this publication also finalized a policy brief on communities and protected areas, developed significant change stories from Chuuk and Pohnpei, also disseminated by August 2022. Significant change stories were developed in July 2022 from Chuuk and Pohnpei. The two significant change stories from Yap and Kosrae were completed in 2019.

127. Overall, the achievement of Outcome 2 level targets is rated as ***satisfactory*** with all targets being achieved except for Mean Detection Rate of birds for which the final report should be submitted within 60 days of the Contract end date of 31 October 2022).

[52] By R2R Chief Technical Advisor, R2R Project Manager, R2R National Technical Coordinator and the APLYS Managing Director with DECEM.

3.3.4 Relevance

128. The FSM-R2R Project is **relevant** to FSM's Strategic Development Plan, specifically to "protect, conserve, and sustainably manage a full and functional representation of marine, freshwater and terrestrial ecosystems". Other strategies that could benefit from R2R:

- A Blueprint for Conserving the Biodiversity of the FSM, specifically the identification of areas of biological significance;
- The NBSAP, specifically the following Strategic Themes:
  - Ecosystem Management;
  - Species Management;
  - Agrobiodiversity;
  - Human Resources and Institutional Development Strategy Goal;
  - Resource Owners;
  - Mainstreaming Biodiversity.

129. FSM-R2R also supports international agreements such as:

- several of the CBD's Aichi 2020 Targets, namely to: i) halve the rate of loss of all natural habitats; ii) manage and harvest all fish and invertebrate stocks, sustainably….; iii) protect at least 17 per cent of terrestrial and inland water, and 10 per cent of coastal and marine areas…; and iv) prevent the extinction of known threatened species;
- the UNCCD 10-year strategic plan namely to: 1) improve the living conditions of affected populations; 2) improve the condition of affected ecosystems; 3) to generate global benefits through effective implementation of the UNCCD;
- GEF Strategies, namely BD-1: Improve Sustainability of Protected Area Systems; LD-3: Reduce pressures on natural resources from competing land uses in the wider landscape; and IW-1: Catalyze multi-state cooperation to balance conflicting water uses in transboundary surface and groundwater basins while considering climatic variability and change;
- UNDAF for the Pacific Subregion 2008-2012 and updated to 2021.

130. The FSM-R2R Project also contributes to SDGs including:

- No 2 – Zero hunger;
- No. 3 – Good health and well-being;
- No. 5 - Gender Equality:
- No. 6 – Clean water and sanitation;
- No. 11 – Sustainable cities ad communities;
- No. 12 – Responsible consumption and production communities;
- No. 13 - Climate action;
- No. 14 - Life below water; and
- No. 15 - Life on land.

3.3.5 Effectiveness

131. The effectiveness of the FSM R2R Project has been ***satisfactory***, in consideration of the holistic ridge-to-reef approach, satisfactory technical assistance provided, the additional resources leveraged by the Project to tackle issues, and the achievement of all most outcomes and objectives. Over the

course of Project implementation between 2015 and 2022, Project strategies and activities were effectively executed summarized as follows:

- The exercise of IEMPs and PA management plans started the conversation for management plans.
- In Yap, there were successful linkages with community work with state level policies and plans that were linked with the national government framework. In the management of ridges to reefs, the work was focused with the Division of Agriculture and Forestry leading this effort with contracted works on activities that were priorities in the community PA management plans and forest stewardship plans; the land is privately owned with compulsory community support. The Yap Marine Resources Management Division (MRMD) also assisted with technical support on marine activities such as the fish biomass, coral reef monitoring, demarcation design, and collecting coordinates for maps. The Project provided resources for things they otherwise could not have done in the past such as mapping and demarcation MPAs, and preparing the bird surveys[53];
- In Chuuk, capacities were built for communities and government on various initiatives such as aquaculture where there was no capacity before. However, with so many stakeholders involved with some of the initiatives, additional Project staff including a technical officer were required to work with the partners to keep activities on track;
- In Pohnpei, the Project assisted in the preparation of the SEA and water quality policy for communities that informed water resources policy of the State, which in turn informs National water resources policy. The State EPA has strengthened collaboration with local, municipal and traditional government levels communities and the national government on the preparation of management plans for PAs. The result was the State placing a moratorium on harvesting mangrove trees to encourage other communities to improve their coastline management. Strong NGOs were recruited to work closely with the State Forestry Department in consultations with municipal governments;
- In Kosrae, work was contracted out to NGOs to delineate terrestrial boundaries and setup consultations with municipal governments strengthening collaboration with the State government and NGOs.

132. Learning exchanges in 2021 and 2022 were thought to be the most effective tool for awareness raising. In Chuuk, stakeholders for a terrestrial project were taken to a marine project to learn how to start a terrestrial project with mangroves and vice versa. The interaction between community members was beneficial to see what challenges and successes other stakeholders face, and not do it on their own. Social media was used for raising awareness. However, radio information was not used as much, serving as a lost opportunity to attract those without access to the internet.

3.3.6 Efficiency

133. The efficiency of the FSM R2R Project is rated as ***moderately satisfactory*** and can be characterized as follows:

[53] A great success story was for the Weloy Forest Stewardship Plan that was implemented with Project support and updated. When the community started the consultation process for the updates, they decided to go even further and develop a holistic plan for the entire Weloy municipality that went beyond the targeted forest stewardship area. The updated FSP and the new holistic plan were developed simultaneously with Project support and endorsed in 2022. Management improvement is also reflected in the METT score.

- The Project had a slow start between 2015 and 2019 with surveys, assessments, training, some legislative work done in some states (Pohnpei and Kosrae) and some rehabilitation work (Tamil and Weloy watersheds in Yap, Nefo watershed in Chuuk);
- Majority of works done post 2019;
- UNDP delayed work on 2 RPAs: RPAs took several months to prepare. MCT then had to undergo a micro HACT assessment prior to MCT receiving the full RPA amount in 2021-22 (Para 91); and BirdLife which had its Chuuk data collection and analysis and Pohnpei preliminary results being delayed for a micro HACT assessment prior to receiving any further funds which has delayed the work until November 2022 (Para 124);
- In Pohnpei, rehabilitation efforts for both upland forests and mangroves experienced delays. Upland forest restoration to be carried out under a Low Value Grant with the Conservation Society of Pohnpei was first slowed by site selection and COVID-19 restrictions, and then later cancelled when the site naturally regenerated over time. For mangrove areas, it took over a year to carry out an assessment and work with partners to determine the sites to be prioritized for potential replanting, to identify a community organization who could implemented the work, to ensure collaboration with State Forestry and communities (State Forestry was particular about the spacing of the trees), to overcome the ongoing COVID-19 pandemic restrictions, to address shortages of staff, and to wait out delays in issuing contracts and payments from the National government and UNDP. As a result, the contract was finally issued and actual planting of mangroves was carried out and completed in 2022;
- In Yap, rehabilitation work in 2 municipalities took longer than expected due to the need for it to be contracted through and implemented by local communities, as the rehabilitated areas are privately owned. Delays were noted in the reporting with lead people leaving. All community work was to take place at the availability of the communities with cultural events such as funerals always take precedence. COVID affected learning exchanges in 2020 with the only learning exchange in Yap taking place in 2022.

3.3.7 Overall Project Outcome

134. The intended Project outcomes have been ***satisfactory***:

- the Project has been mostly successful at achieving its objective to "*strengthen local, State and National capacities and actions to implement integrated ecosystem-based management through 'ridge to reef' approach on the High Islands of the four States of the FS*" through the Pohnpei SEA and IEMP, the Kosrae SEA and Land Use Plan, and Forest Stewardship Plans for Chuuk and Yap. There have also been improvements in the management of SLM and PAs as indicated by METT scores;
- *Outcome 1: "Ecosystems management and rehabilitation on the High Islands of the FSM to enhance Ridge to Reef connectivity"* has been mostly successfully in achieving more than 57 ha and 27 ha of upland forests and mangroves & wetlands rehabilitated respectively, as well as US$22.5 million co-financed for SLM. FSPs for Yap and Chuuk have been endorsed by the communities of Weloy and SOU (they do not require government endorsement). Even though the Pohnpei IEMP and revised Kosrae Land Use plan were not endorsed by their respective governments, they are integrated plans bringing together activities from multiple agencies, many of the activities within them are already being implemented as mandated;
- *Outcome 2: "Management effectiveness enhanced within new and existing PAs on the High Islands of FSM as part of the R2R approach (both marine and terrestrial)"* has been mostly successfully in achieving operational PA management support systems in all 4 states (as detailed

in the FSM PAN Operations Manual), and an increase in fish biomass from conservation efforts. The gazetted status of PAs did reach 36,488 has against a target of 24,986 ha.

3.3.8 Sustainability of Project Outcomes

135. In assessing sustainability of the FSM-R2R Project, the Evaluators asked "how likely will the Project outcomes be sustained beyond Project termination?" Sustainability of the FSM-R2R Project's outcomes was evaluated in the dimensions of financial resources, socio-political risks, institutional framework and governance, and environmental factors, using a simple ranking scheme:

- *4 = Likely (L):* negligible risks to sustainability;
- *3 = Moderately Likely (ML):* moderate risks to sustainability;
- *2 = Moderately Unlikely (MU):* significant risks to sustainability; and
- *1 = Unlikely (U):* severe risks to sustainability; and
- *U/A = unable to assess*.

Overall rating is equivalent to the lowest sustainability ranking score of the 4 dimensions. Details of sustainability ratings for FSM-R2R Project are provided on Table 9.

136. *The overall FSM R2R Project sustainability rating is moderately likely (ML).* This is primarily due to:

- the long-term sustainability of PA and ecosystems management and rehabilitation is reliant on Compact Free Association, USFS and other sources which is reliable;
- capacity building programs are in place for training when needed within a 5-year timeframe for knowledge to be transferred to new people;
- climate-related impacts will continue to be an issue for long-term impacts of sustainability of PA and ecosystems management and rehabilitation.

3.3.9 Country Ownership

137. The Federated States of Micronesia's ownership of the FSM-R2R Project is represented with the following agreements:

- the Convention on Biological Diversity (CBD) that was ratified on 20 June 1994;
- National Biodiversity Strategy and Action Plan (NBSAP) that was published in 2002 and updated in 2018. The visions portrayed in the NBSAP is "the FSM will have more extensive, diverse, and higher quality of marine, freshwater, and terrestrial ecosystems, which meet human needs and aspirations fairly, preserve and utilize traditional knowledge and practices, and fulfill the ecosystem functions necessary for all life on Earth"[54];
- 4th National Report to the CBD submitted in 2010;

[54] The FSM's vision for the nation, as stated in the 2002 NBSAP, is that In support of this vision, the theme for the 2004-2023 SDP for the nation is "Achieving Economic Growth and Self Reliance. External economic shocks and natural disasters will always threaten our development efforts and it is the Government's hope that the implementation of the strategies outlined in the SDP will cushion the adverse impact of these shocks against the achievement of the national vision."

Table 9: Assessment of Sustainability of Outcomes

Actual Outcomes (as of September 2022)	Assessment of Sustainability	Dimensions of Sustainability[43]
Actual Outcome 1: Ecosystems management and rehabilitation on the High Islands of the FSM has enhanced Ridge to Reef Connectivity though not targets envisaged by the Project	• *Financial Resources:* The Project has been successful in raising co-financing, and has access to funds from Compact Association and USFS. Volume of funds is dependent on the capacities of the recipients; • *Socio-Political Risks*: Many of the stakeholders are undertakingrehabilitation of upland forests, mangroves and wetlands, and are adopting DLPs. This requires consultation with communities prior to plantation of trees. If this is done, there should be no problems accessing some of the sites. Forestry staff are supported within agency mandates, by Compact funds, and USFS grants. Furthermore, rehabiltiation is a priority strategy in the Forest Action Plan; • *Institutional Framework and Governance:* Endorsements of SEAs and IEMPs and approval of land use plans await final government approvals. In addition, there is staff turnover when dealing with supervisory roles related to rehabilitation of uoland forests, mangroves and wetlands, and a succession plan is needed for the TACs every 5 years. Training is needed for TACs to be in place as a part of a succession plan to maintain capacities and implement policies with terrestial and marine management; • *Environmental Factors:* Climate-related events may have a long-term impact on the sustainability of ecosystems management and rehabilitation. ***Overall Rating***	3 4 3 3 **3**
Actual Outcome 2: Management effectiveness has been enhanced within new and existing PAs on the High Islands of FSM as part of the R2R approach (both marine and terrestrial) though not to the targets envisaged by the Project	• *Financial Resources:* The long-term sustainability of PA management is dependent on the MC endowment funds; • *Socio-Political Risks*: Access to some of the privately-owned sites requires guides. This can make access difficult. In Yap as well as other states, turnover rate of trainers for MPAs has been a problem and needs to be improved for sustainability of the Project. However, these sites are owned and managed by the communities and traditional leaders, making these sites more sustainable in the long term; • *Institutional Framework and Governance:* All 4 states have access to the PA management support systems in place as detailed in the FSM PAN Operations Manual. The PAN OM details the support systems, and each state now has a PAN Coordinator; • *Environmental Factors:* Climate-related events may have a long-term impact on the sustainability of PAs. ***Overall Rating***	3 3 3 3 **3**
	Overall Rating of Project Sustainability:	**3**

[43] Ibid 3. Overall rating based on lowest score

- the Micronesia Challenge (MC) which was launched in 2006 to which 5 Micronesian governments (the Republic of Palau, the Federated States of Micronesia, the Republic of the Marshall Islands, the U.S. Territory of Guam and the Commonwealth of the Northern Mariana Islands) commit to "effectively conserve at least 30 percent of the near-shore marine resources and 20 percent of the terrestrial resources across Micronesia by 2020." The goal was revised, extended and expanded in 2018 by the leadership during the Micronesian Island Forum to 'effectively manage 50 percent of near-shore marine resources and 30 percent of terrestrial resources across Micronesia by 2030'.

138. For FSM, the MC is a commitment by GoFSM (and other governments) to strike a critical balance between the need to use their natural resources today and the need to sustain those resources for future generations. With the MC project document stating that the Challenge "this strategy recognizes that in Micronesia, grassroots engagement, spearheaded through the PAN Networks, must bring institutional strengthening, help develop finance and project management skills including granting and reporting procedures…." FSM is an important player in the Micronesia Challenge and has made significant contributions of funding to environmental protection. The Project was to support the design of a nationwide network of marine and terrestrial PAs to serve as one of the building blocks of the Micronesia Challenge. In turn, the MC was to mobilize sustainable funding and providing isolated island communities with the expertise they need to preserve their resources.

3.3.10 Gender equality and women's empowerment

139. Though the Project was originally not required to develop a Gender Action Plan (GAP), the Project conducted a gender assessment and developed a GAP in 2021. While the Project design did not provide a clear and transparent approach to mainstreaming gender into Project activities, the Project was able to actively engage women and youth from different sectors of society, from leaders to the most vulnerable groups and, in several instances, promote equal participation of men and women in capacity building, planning, decision-making and implementation throughout the Project's lifecycle.

140. On the Project, there are more women than men, a slight gender imbalance. While men are recognized as the physically stronger sex, duties between genders are equal. Men clear the land and the women plant trees and shrubs. While the Micronesian culture allows for equal opportunities in all 4 states, the Project has contributed to ensuring equal representation to offset the heavily male-dominated agencies by having good representation of women in TACs in Kosrae, Yap and Chuuk. In addition, there is legislation criminalising domestic violence, supported by a growing focus on work to prevent violence against women, and to increase access to quality response services for survivors[44]. No monitoring has been done to measure gender specific changes to the Project's beneficiaries.

3.3.11 Cross cutting issues

141. The main cross-cutting issues of the FSM R2R Project is disaggregation by gender and disadvantaged groups. Most of the staff on the Project were women, and many activities involved women, with specific events planned around women's and youth groups. The Chuuk Women's Council Nefo project focused on women and youth. Yap held two summer programs targeted at youth. However,

[44] Federated States of Micronesia - United States Department of State

since most activities were open to women and youth, planning typically did not entail specific measures for gender or age.

142. When preparing IEMPs and PA management plans, special attention was given to women's, youth and disadvantaged groups to hear their concerns and viewpoints in socioeconomic surveys. For example, women reviewed the surveys to ensure they captured both genders roles[45]; There were no special events for disabled stakeholders, who despite making up 11% of the population, do not have any special interest groupings.

3.3.12 GEF Additionality

143. The issue of GEF additionality is quite clear on the FSM-R2R Project. Without the Project, there would be no support for the overall process of implementing integrated ecosystem-based management through a "ridge to reef" approach on the High Islands of the four States of the FS. This includes Project-supported surveys, assessments, training, legislative work, and rehabilitation and management work, all designed to enhance Ridge to Reef connectivity, and to enhance management effectiveness within new and existing PAs on the High Islands of FSM.

3.3.13 Catalytic/Replication Effect

144. Catalytic and replication effects can be found in activities related to FSM R2R management and cooperative decision making and policy discussions. This includes:

- Chuuk Women's Council, an NGO, which was designed to have conservation and environment programmes amongst other programmes to build the capacities of local people so that they can become productive and self-sustaining. CWC guided women's group to take care of watersheds of biological significance with the intention of replicating the project experience which happened;
- watershed activities in Chuuk being replicated on 2 other islands, Fefan funded by TNC (supplies the bulk of marketable food crops for the islands with successes in learning how to plant lemon grass, plantations to limit soil erosion on the Nefo watershed) and Oneisomw (mixed and rotational cropping of taro and lemon grass confuses pests, a nursery for tree planting, and addressing water quality and food security). The Oneisomw management plan contained an MPA which contained tree planting that was replicated on 2 other islands for terrestrial and marine ecosystems (funded by MCT);
- in Pohnpei, PA and watershed systems were better managed by targeted communities. The plan templates and actions has influenced other communities into following a similar pathway to sustainability;
- In Yap, the Gachpar 119 ha MPA was active in the enforcement of an MPA plan. Capacities have been built including scuba diving certifications for data collection, enforcement training to their management plans, and community outreach. It has been reported that communities are catalyzed into wanting to replicate this experience for MPAs.

[45] If asked about the number of fishers per household, males would respond if the survey is translated as reef or pelagic fishing. However, if questions on 'gleaning' are included, women fishers are better captured.

3.3.14 Progress to impact

145. Impacts have been:

- In Yap, there has been raised community awareness of ecosystem sustainability and there have been efforts by the Division of Agriculture and Forestry to prepare management plans and forest stewardship plans in collaboration with other agencies and communities. These plans include improving nurseries and implementing DLPs as to provide compost. Water quality impacts have not been monitored with the Yap EPA carrying out the water quality assessment for the DLP site in Dachngar, and regular drinking water assessments around the island. The main impacts of the Project were strengthened capacities and partnerships built with the national, state and local government and NGOs to effectively work together to accomplish integrated ecosystem management led by the Yap Division of Agriculture and Forestry with the needs of the communities being led by communities with support being provided by the State. This led to the Project being very effective on local policies and laws on integrated ecosystem management and PAs, which informs national policies;
- In Chuuk, the impact has been strengthening of partnerships driving people to work together for old and new project towards a common goal of integrated ecosystems management. Though progress to impact is heavily reliant on funding and subsequent technical support, it is good within a 5-year timeframe when knowledge needs to be passed on to new people. The Project had impacts by bringing in funds for communities to branch out and address ecosystem issues such as an aquaculture as an alternative livelihood for owners of MPAs (the Project helped in a collaborative effort to support aquaculture training in 2021 resulting in one of the Project PA rangers being capacitated to help with future trainings). However, risks preventing long term impacts from happening include the absence of political will in the land tenure system at the state level; with some turnover at community level, communities being responsible in general for their resources is more sustainable long term, and getting Government leaders to recognize and support those efforts. This seems to imply the Government should have more authority of community PAs;
- in Pohnpei, the Project has strengthened collaboration with national, state, and local governments, communities and NGOs by sharing plans and documents, allowing communities to improve their knowledge from the national and state perspective to manage their natural resources. The result has been PA and watershed systems being better managed by the communities including the delineation of watershed and MPA lines to improve water quality, a positive impact for all communities;
- In Kosrae, municipal resource management committees (RMCs) were reactivated and contributed to efforts in Utwe and Malem. Project supported learning exchanges increased awareness of best practices, and resulted in the forming of a Locally Managed Area (LMA) network to continuing the sharing of information. The Kosrae SEA was the first carried out for the state, and only the second in the FSM, and helped inform the update of the Kosrae Land Use plan;
- climate change is becoming an issue for sustaining long-term impacts of the Project. With damaging cyclones occurring every 2 to 5 years (previously it was every 10 years), this will be a challenge to communities with meagre capacities.

146. The current protected area network and the approach to SLM are conserving biodiversity patterns and ecological processes in the FSM, though not as effectively as targeted. While the number of protected areas has grown over the past decade, the government has shown growing support in

providing the necessary resources for sustaining donor supported actions like those of the GEF Project and the Micronesia Challenge (MC) supporting a regional PAN. However, the GoFSM has been trying to be effective in protecting BD throughout FSM. Most protected areas are for now, under effective management as indicated in the METT scores, through surveys and biological monitoring. Most PAs in FSM are bottom up, not top down, and supported by the PAN framework, PAN OM, MC Endowment, new agreements, and the updated plans. Some of the Project's partners have had their capacities built and are running for office to become champions of the PAN.

4. MAIN FINDINGS, CONCLUSIONS, RECOMMENDATIONS AND LESSONS

4.1 Main Findings

147. Despite difficulties experienced in NIM arrangements with the PIU trying to support set procedures, protocols and manage the complexities in UNDP fund administration (Paras 58, 73 and 74), the FSM-R2R Project has enabled national and state governments to undertake joint and coordinated management of a ridge-to-reef approach to ecosystem management. Though this comes with some caveats, the end result is national, state, local and traditional governments and their stakeholders appear enabled to disseminate information about ecosystem management that preserves ridge-to-reef ecosystems and protected areas, and are demonstrating the means to implement integrated ecosystems management. Much of the legislation and finalization of IEMPs, SEAs, FSPs and land use plans have been endorsed by the State governments and communities. Revitalization of the cross-sector working groups was completed.

148. The caveats that come with this enabling environment are:

- Kosrae's water quality monitoring results are still pending the availability of a lab technician, though Yap and Pohnpei's results have been processed;
- legal status of gazetted PAs needs to be accelerated with political will serving as a barrier;
- the targets of fish biomass have been achieved despite the lead scientist noting that the original indicators were flawed, compromising the target results that were not shared as an accurate representation of priority fish species biomass (Para 121).

4.2 Conclusions

149. Despite all the difficulties in mobilizing the Project and its resources including difficulties being experienced at the PIU and DECEM to support UNDP set procedures, protocols and complex administration of funds, the FSM-R2R Project has in 2022 strengthened local, State and National capacities and actions to implement integrated ecosystem-based management through "ridge to reef" approach on the High Islands though not to the targeted levels envisaged. The biodiversity tool METT scores, the PA capacity scorecard, and the SLM capacity scores[46] for targeted PAs, SLM, and PA management capacity were generally achieved as targeted with improved management capacities amongst all PA and SLM stakeholders. There appears to be room for more improvements, despite these tools not accurately reflecting strong achievements within the communities.

150. With the IEMP for Pohnpei, revised KLUP for Kosrae and the FSPs for Chuuk and Yap all being finalized, including endorsement of FSPs at the community level, ecosystems rehabilitation for upland forests, mangroves and wetlands including tree planting and DLPs are being implemented. All 4 states were making good progress to finalize PA management plans to gain access to regional and national technical and fiscal resources. These actions send signals that communities are serious about ecosystem sustainability and the conservation of their natural resources. The momentum built by the Project to reach this stage of development needs to be continued.

[46] The biodiversity METT tool assesses the management effectiveness of individual PA sites), while the PA capacity scorecard, and the SLM capacity scorecard are focused at the government system level.

4.3 Recommendations

151. The recommendations made in this Evaluation are made in the spirit of sustaining and improving ongoing and future delivery of services by FSM R2R, and on the basis of the lessons learned during implementation of the FSM R2R Project.

152. *Recommendation 1 (to UNDP, DECEM and state entities): The Project should develop an overall lessons learned for future projects to avoid repeating the same mistakes.* Lessons learned documents focusing on specific themes, Component 1: "Implementing a Strategic Environmental Assessment (SEA) in small Pacific islands", and Component 2: "Strengthening Protected Area Management through effective community participation" were completed and disseminated in 2021 and 2022.

153. *Recommendation 2 (to UNDP, DECEM and state entities): Source sustainable funding to strengthen regulations and enforcement measures for achieving LDN and mainstreaming SLM/BD as well as developing an approved national action programme to for SLN/LDN that can be implemented at the state level*: The strengthened state level laws, regulations, ordinances, and standards would contribute towards strengthening enforcement mechanisms to combat land degradation. A FSM National Action Programme (NAP) was developed in 2013 to combat land degradation, setting priorities, procedures, and standards for achieving Land Degradation Neutrality (LDN) across all States that mainstreams LDN, SLN and BD principles and targets into national and state policies, plans, programmes, and budgets. This can be updated to improve institutional coordination for SLM and BD that addresses land degradation. This would include private sector engagement and the building of public-private partnerships with existing working groups that includes greater participation of women.

154. *Recommendation 3 (to UNDP, DECEM and state entities): To achieve sustainable and integrated land and sea management, continue to provide support for the strengthening of capacities of government on supply of information and decision support tools*. SEAs are the foundation of decision-support systems (DSS) that measure the degree to which selected development scenarios are achieved through implementing and continually monitoring the effectiveness of ILMPs/IEMPs. Support for the strengthening of capacities of government should include strengthening of baseline information through national level spatial mapping to facilitate sharing of information with other states[47]. This will provide the ability to assess trends, drivers and hotspots of land and marine degradation using the UNCCD global indicators. It will also lead to assessments of resilience of various habitats and landscapes to degradation and climate induced risks, protocols for monitoring marine and land degradation, and guidelines for mainstreaming SLM/BD into the agriculture, infrastructure, and marine sectors. Gender-focused and gender-responsive extension programs will ensure quality training of environmental officers in the technology transfer and equipment for LDN and marine monitoring that will mainstream SLM/BD in discussions on terrestrial and marine ecosystems.

155. *Recommendation 4 (to UNDP, DECEM and state entities): Find the means to raise and maintain the capacities of communities and civil society to reduce marine and land degradation on their own*. This will involve stronger community participation in measures to reduce land and marine degradation, sustain ecosystem services and biodiversity, as well as improve livelihoods and wellbeing. Pilots can be conducted for:

[47] This is prioritized for terrestrial in the Forest Action Plan, and is the focus of the Blue Prosperity Micronesian project for marine areas (spatial planning for the latter already in progress as of 2022).

- sustainable land and marine management over critical terrestrial and coastal landscapes can continue to be implemented, including land and marine restoration under improved practices that are community-led integrated management plans with equal participation of women and men;
- enhancing ecosystem services and biodiversity, reversing land degradation from agriculture and marine sectors through nature-based solutions, engaging both youth and an equal participation of women and men;
- smallholder farmers on traditionally owned lands to support and implement traditional and innovative climate-smart agricultural practices for SLM and CCA that contribute to LDN, protect ecosystem services, biodiversity, and food security, and enhance incomes.

156. *Recommendation 5 (to UNDP, DECEM and state entities): With implementation of community management plans for PAs being reliant on donor funding, simplify the fund disbursement process to improve the access to fundings*. There is:

- a challenge of aligning the expectations of donors with those of communities with respect to water and food security, education, health and any other sector relevant to community well-being. While SEAs and IEMPs include protection of key ecosystems for livelihoods, community capacities for planning and applying for funds needs to be built together with their capacity to absorb project funds. Administrative and financial capacities are required skills for managing funds disbursed for implementing management planned activities;
- a need to develop fund-raising capacity at the community level and to better understand and target appropriate donors with the existence of SEAs and IEMPs representing an opportunity to secure funds from national and regional entities;
- a need to build communities capacity to access funds, to build or strengthen partnerships with major stakeholders and their technical staff, which can assist communities in seeking and securing funds that support their plans. This can also include building or strengthening partnerships with major stakeholders and their technical staff, who can assist communities in seeking and securing funds that support their plans. This is essential to ensuring long-term management goals are met;
- a need to ease the burden of administration of UNDP contracts. There must be an ingenious way to accelerate the administration of UNDP contracts.

157. *Recommendation 6 (to UNDP, DECEM and state entities): Ensure and increase community awareness of the need for conservation of marine and terrestrial ecosystems, PAs and biologically important watersheds*. With low retention rate on past community outreach initiatives, community outreach on conservation issues needs to be continued and scheduled on an annual basis or a periodic basis:

- Awareness-raising programmes on marine and SLM and the benefits of tackling land degradation can be delivered through targeted communications, education and campaigns and community participation;
- Knowledge management platforms can be utilized to share information and project lessons between states, landscapes and communities that would include an on-line portal, learning exchanges, and demonstration farms;
- South-South cooperation across the Pacific and with other SIDS will be beneficial to raising awareness to exchange best practices and lessons learned that support marine management, LDN and SLM.

158. *Recommendation 7 (to UNDP and the GoFSM): Review and streamline implementation arrangements that will result in a more collaborative management of this Project and other projects such that administrative duties of GoFSM counterparts are minimized*. The relationship between UNDP and the GoFSM has been strained mainly due to inadequate communication. For example, when policies and procedures change, they are not shared or communicated by UNDP to the PIU in a timely manner to ensure staff are aware and understand them fully. Additionally, a high turnover rate within UNDP, resulting in the PIU/DECEM having to deal with several finance officers, all with different advice procedures. This was frustrating as it required having to re-introduce the PIU to new UNDP officers, learning about the FSM-R2R Project, all while much of the administrative work was transferred to the PIU to ensure work continued. This only caused further delays in FSM-R2R activities. With DECEM's primary mandate to ensure that the GoFSM are meeting their obligations with the donors through the PIU, streamlining implementation arrangements can be made to ease the administrative burden of GoFSM or other government counterparts through:

- Option 1: maintain current the current implementation modality where the process of quarterly work planning is strengthened such that payments can be processed within a 2-week period after the end of the quarter with a government-backed setup to submit required documentation (such as ledgers). This is an option given that UNDP is not flexible in its modality of advancing funds; and/or
- Option 2: implement a direct payment modality as a part of NIM where the government procures or implements an activity and UNDP makes the payments on their behalf, and shift all international procurement in the work plan to UNDP implementation[48]. This would increase UNDP's support services to the Project without formally changing NIM, reducing the work load and administrative time of DECEM and allowing them to focus more on implementation issues, notably stakeholders in the 4 States as they require specialized attention.

The key to this recommendation is to continue having DECEM and the PIU maintaining and building good working relations with the key stakeholders in the 4 States. This will lead to more collaborative management if the Project is to minimize the financial, socio-economic, environmental, institutional and government risks that will most likely affect Project implementation during its follow-up phase.

159. *Recommendation 8 (to UNDP, DECEM and state entities): Maintain the good gender work that has work contributed to ensuring equal representation that offsets the heavily male-dominated sectors by having good representation of women in TACs in Kosrae, Yap and Chuuk, and increasing the effective enforcement of legislation that criminalises domestic violence*. DECEM and the FSM as a whole has done admirable work to be inclusive on the Project, from actively engaging women and youth from different sectors of society, and promoting equal participation of men and women in capacity building, planning, decision-making, and implementation. While this recommendation is for maintaining this level in future work, more effective enforcement of legislation criminalising domestic violence is needed, especially considering the underreporting of domestic violence. In addition, more work is needed on support systems that prevent violence against women (such as the provision of shelter and a place to work in support of women in abusive situations) and to increase access to quality response services for survivors of domestic violence (such as a hotline and enhanced training of police officers to handle domestic violence cases).

[48] If GoFSM wishes to use UNDP services to help in implementation (such as procurement of goods and services), a "Direct Project Cost" fee will be charged.

4.4 Lessons learned

160. *Lesson #1: Working with financially capable NGOs can sometimes overcome difficulties in the procurement of goods and implementation of activities.* This is certainly the case for the Chuuk CWC which had funds which were used to pay workers while payments from the national government and UNDP were being processed. In Yap, the Yap Catholic High School was contracted to carry out a summer awareness program for youth since they had the financial capacity to conduct the activity and get paid after completion. However, most local NGOs and CBOs do not have the financial capacity to cover activity expenses during implementation, and wait to receive payment at the end of the assignment or as deliverables are completed.

161. *Lesson #2: Build awareness and knowledge within communities by implementing a bottom-up approach that is beneficial for capturing traditional knowledge, raising awareness within communities of the consequences of their own actions on their environment and resources and external development activity, and to transparently inform them on the process that is being implemented*. With the lack of capacity at the community level having a significant impact on effective marine, terrestrial and PA management, there are key steps to ensure buy-in, engagement, and successful communication with relevant stakeholders. One step is the provision of information that is easily understood and accessible, delivered in a culturally sensitive participatory manner, mindful of stakeholder time constraints, and adaptable as new information become available. Contracting a local consultant familiar with the state to coordinate and lead data collection process is also a key step in successful communication with relevant stakeholders.

162. *Lesson #3: Learning exchanges are the most effective tools for raising awareness*. Through face-to-face learning exchanges, communities are becoming more aware of the benefits associated with protection and management of nature and biodiversity in marine and terrestrial and protected areas. For example, Pohnpei State has been hosting annual cross-site visits where resource owners, conservation officers and supporting agencies come together to share progress, best practices, lessons learned and connect with new resources, which has helped to build their capacity to better manage their protected areas. In Chuuk, there was a learning exchange between the Sapo, Oror, and Ununo (SOU) Conservation Society and the Oneisomw Resource Management Committee (ORMC), as well as the Chuuk Departments of Marine Resources and of Agriculture, the Chuuk Protected Areas Network, and the Chuuk Conservation Society, allowing these CBOs government agencies to share information on their resource management experiences and to learn from each other as natural resource management partners with the goal of inspiring activities achieve immediate and long-term outcomes.

163. *Lesson #4: Identify leaders who are particularly interested in and passionate about the process and could serve as 'champions'*. This would involve identification of community members who can build partnerships between communities, local government and government agencies, improving communication and collaboration among state partners and communities. For establishing protected areas and ensuring management effectiveness, selecting a champion through a participatory process represents the best approach although it is very time consuming and highly dependent on community members' time, their priorities, the geographic make-up of sites, weather conditions, cultural mores, and other external factors, with some PAs and their communities being remote and difficult to access. Most importantly, community social events (e.g., funerals, celebrations) are deeply embedded in community social life, and are prioritised over other activities.

164. *Lesson #5: In the FSM, political changes, staff turnover, insufficient technical staff or officers is a challenge to the pace of implementation of project such as the FSM-R2R Project*. Changes in the politics of a state involve new administrations that typically come on-board, generally requiring time to adjust. Staff turnover and insufficient staff are further causes for delays in overall project implementation. Since government agencies operate at multiple levels, they have limited capacity to assist communities throughout the PA establishment process and to officially recognise their protected areas. Staff need to have an incentive to remain employed, such as attractive salaries and room for performance-based raises. One mitigating measure implemented during the Project was the setup of collaboration between communities and NGOs at some sites to address the capacity gap, and placement of PAN Coordinators in each state with the intention that the positions become permanent if funding is found.

165. *Lesson #6: Spreading out the timeline for SEAs, IEMPs, and other plans helps alleviate the strain on stakeholders and partners on very intensive processes*. The process of preparing these documents takes an enormous amount of time when considering the number of stakeholders to consult, the logistics of the meetings from island to island, and the number of times a stakeholder is consulted.

APPENDIX A - MISSION TERMS OF REFERENCE FOR FSM-R2R PROJECT TERMINAL EVALUATION

Services/Work Description: International Consultant

Project/Programme Title: Federated States of Micronesia Ridge to Reef Project

Consultancy Title: Team Leader

Duty Station: Virtual (travel restrictions still applied)

Duration: 30 Days

Expected start date: 25 July 2022

1. BACKGROUND

The objective of the project" is to strengthen local, State and National capacities and actions to implement integrated ecosystem based management through "ridge to reef" approach on the High Islands of the four States of the FSM. To achieve this objective, the project focuses on two components namely:

(Component 1) -Integrated Ecosystems Management and Rehabilitation on the High Islands of the FSM to enhance Ridge to Reef Connectivity

(Component 2) - Management Effectiveness enhanced within new and existing PAs on the High Islands of FSM as part of the R2R approach (both marine and terrestrial)

The FSM R2R Project is nationally executed by Department of Environment, Climate Change and Emergency Management (DECEM). The Global Environment Facility (GEF) provided a grant of USD 4,689,815 and total co-financing from partners amounts to USD 17,886,398. Initially, the project had a life of 5 years but was granted an extension until May 19, 2022

The project is part of the Pacific R2R program on *"Pacific Islands Ridge-to-Reef National Priorities - Integrated Water, Land, Forest & Coastal Management to Preserve Ecosystem Services, Store Carbon, Improve Climate Resilience and Sustain Livelihoods*". It is consistent with three of the GEF-5 focal areas including Biodiversity, International Waters, and Land Degradation, and is designed to advance Tuvalu's work towards achieving national and international priorities in these key focal areas through a comprehensive Ridge to Reef approach. As such, the project will deliver directly on: the Convention on Biological Diversity (CBD)'s Programme of Work of Protected Areas (PoWPA) of the Aichi Targets and the National Biodiversity Strategy and Action Plan (NBSAP 2012 – 2016); the UN Convention to Combat Desertification (CCD)'s National Action Programme (NAP); the Sustainable

Marine and terrestrial biodiversity and ecosystem services underpin social well-being and the economy of the Federated States of Micronesia, and are vital to food security. These resources and services, however, are currently being undermined by unsustainable natural resource use and practices; spread of invasive alien species; the impacts of climate change; and, the limitations of government to effectively implement its programs and policies.

This project is designed to engineer a paradigm shift in the approach to and management of natural resources from an ad-hoc species/site/problem centric approach to a holistic ecosystem-based management "ridge to reef" approach guided by planning and management process that are informed by actual data. The shift to an

ecosystem-base approach within National and State governments will ensure that whole island systems are managed to enhance ecosystem goods and services, to conserve globally important biodiversity and to sustain local livelihoods.

The project will promote an integrated approach towards fostering sustainable land management and biodiversity conservation by seeking greater awareness, knowledge and participation of all stakeholders in achieving a greater balance between environmental management and development needs. In doing so it will reduce conflicting land-uses and land-use practices and improve the sustainability of terrestrial and marine management so as to maintain the flow of vital ecosystem services and sustain the livelihoods of local communities. Further, the project will demonstrate sustainable land management practices testing new management measures, as needed, to reduce existing environmental stressors and institutional limitations.

The project will also enhance the FSMs capacities to effectively manage its protected area estate as well as increase the coverage of the terrestrial and marine protected area netI work on the High Islands

Since the global Covid-19 pandemic has escalated into a global humanitarian and socio-economic crisis in the first quarter of 2020, many countries, including FSM, responded immediately by implemented strict travel restrictions as a necessary measure to mitigate the spread of the virus. International travel is limited to approved repatriated citizens and those entering the country must have in possession a Quarantine Certificate and a mandatory negative COVID-19 test result. Travelers (citizens and essential workers only) entering FSM are expected to undergo a mandatory 14-day quarantine period (in designated isolation facilities) before they are allowed to move freely. This is in addition to the 10-day quarantine period in Guam. Initially there was a lockdown period, with national government priorities focused on a Covid 19 response plan. This had a negative impact on the project, resulting in delays to implementation. Implementation has gradually picked up but is still slow due to restrictions. To date, there are no known cases of Covid related deaths in FSM. National Government officials continue to monitor the situation and provide regular updates. In addition, the FSM President has requested that the emergency declaration be extended to January 2022

The TE report will assess the achievement of project results against what was expected to be achieved and draw lessons that can both improve the sustainability of benefits from this project, and aid in the overall enhancement of UNDP programming. The TE report promotes accountability and transparency and assesses the extent of project accomplishments.

Further to this, the objectives of the evaluation will be to:

- assess the achievement of project results supported by evidence (i.e. progress of project's outcome targets),
- assess the contribution and alignment of the project to relevant national development plan or environmental policies;
- assess the contribution of the project results towards the relevant outcome and output of the Sub Regional Programme Document (SRPD) & United Nation Pacific Strategy (UNPS/UNDAF)
- assess the positive and negative effects of the project on local populations (e.g. income generation/job creation, improved natural resource management arrangements with local groups, improvement in policy framework for resource allocation and distribution, regeneration of natural resource for long term sustainability);
- Assess the extent which the project outcomes have contributed to better preparations to cope with disasters or mitigate risk, and or addressed climate change mitigation and adaptation as relevant
- Assess the extent to which poor, indigenous, persons with disabilities and other disadvantaged or marginalised groups benefitted from this project;
- Assess the effectiveness and quality of gender related results contributed by the project using the Gender Results Effectiveness Scale (GRES)
- examination on the use of funds and value for money
- draw lessons that can both improve the sustainability of benefits from this project, and aid in the overall enhancement of UNDP programming

The TE will be conducted according to the guidance, rules and procedures established by UNDP and GEF as reflected in the UNDP Evaluation Guidance for GEF Financed Projects.

2. SCOPE OF WORK, RESPONSIBILITIES AND DESCRIPTION OF THE PROPOSED WORK

The TE will assess project performance against expectations set out in the project's Logical Framework/Results Framework (see ToR Annex A). The TE will assess results according to the criteria outlined in the 'Guidance For Conducting Terminal Evaluations of UNDP-Supported, GEF-Financed Projects'.

The Findings section of the TE report will cover the topics listed below.

A full outline of the TE report's content is provided in ToR Annex C.

The asterisk "(*)" indicates criteria for which a rating is required.

Findings

Project Design/Formulation

- National priorities and country driven-ness
- Theory of Change
- Gender equality and women's empowerment, but consideration should be given to the fact that this was not part of project design
- Social and Environmental Safeguards
- Analysis of Results Framework: project logic and strategy, indicators
- Assumptions and Risks
- Lessons from other relevant projects (e.g. same focal area) incorporated into project design
- Planned stakeholder participation
- Linkages between project and other interventions within the sector
- Management arrangements

Project Implementation

- Adaptive management (changes to the project design and project outputs during implementation
- Actual stakeholder participation and partnership arrangements
    - Project Finance and Co-finance
    - Monitoring & Evaluation: design at entry (*), implementation (*), and overall assessment of M&E (*)
- Implementing Agency (UNDP) (*) and Executing Agency (*), overall project oversight/implementation and execution (*)
    - Risk Management, including Social and Environmental Standards

Project Results

- Assess the achievement of outcomes against indicators by reporting on the level of progress for each objective and outcome indicator at the time of the TE and noting final achievements
- Assess achievements against the expected project outputs and work plan activities
- Relevance (*), Effectiveness (*), Efficiency (*) and overall project outcome (*)
- Sustainability: financial (*), socio-political (*), institutional framework and governance (*), environmental (*), overall likelihood of sustainability (*)
- Country ownership
- Gender equality and women's empowerment
- Cross-cutting issues (poverty alleviation, improved governance, climate change mitigation and adaptation, disaster prevention and recovery, human rights, capacity development, South-South cooperation, knowledge management, volunteerism, etc., as relevant)
- GEF Additionality

- Catalytic Role / Replication Effect

Progress to impact

Main Findings, Conclusions, Recommendations and Lessons Learned

- The TE team will include a summary of the main findings of the TE report. Findings should be presented as statements of fact that are based on analysis of the data.
- The section on conclusions will be written in light of the findings. Conclusions should be comprehensive and balanced statements that are well substantiated by evidence and logically connected to the TE findings. They should highlight the strengths, weaknesses and results of the project, respond to key evaluation questions and provide insights into the identification of and/or solutions to important problems or issues pertinent to project beneficiaries, UNDP and the GEF, including issues in relation to gender equality and women's empowerment.
- Recommendations should provide concrete, practical, feasible and targeted recommendations directed to the intended users of the evaluation about what actions to take and decisions to make. The recommendations should be specifically supported by the evidence and linked to the findings and conclusions around key questions addressed by the evaluation.
- The TE report should also include lessons that can be taken from the evaluation, including best and worst practices in addressing issues relating to relevance, performance and success that can provide knowledge gained from the particular circumstance (programmatic and evaluation methods used, partnerships, financial leveraging, etc.) that are applicable to other GEF and UNDP interventions. When possible, the TE team should include examples of good practices in project design and implementation.
- It is important for the conclusions, recommendations and lessons learned of the TE report to include results related to gender equality and empowerment of women.

The TE report will include an Evaluation Ratings Table, as shown below:

Monitoring & Evaluation (M&E)	Rating[49]
M&E design at entry	
M&E Plan Implementation	
Overall Quality of M&E	
Implementation & Execution	Rating
Quality of UNDP Implementation/Oversight	
Quality of Implementing Partner Execution	
Overall quality of Implementation/Execution	
Assessment of Outcomes	Rating
Relevance	
Effectiveness	
Efficiency	
Overall Project Outcome Rating	
Sustainability	Rating
Financial resources	
Socio-political/economic	
Institutional framework and governance	
Environmental	
Overall Likelihood of Sustainability	

[49] Outcomes, Effectiveness, Efficiency, M&E, I&E Execution, Relevance are rated on a 6-point rating scale: 6 = Highly Satisfactory (HS), 5 = Satisfactory (S), 4 = Moderately Satisfactory (MS), 3 = Moderately Unsatisfactory (MU), 2 = Unsatisfactory (U), 1 = Highly Unsatisfactory (HU). Sustainability is rated on a 4-point scale: 4 = Likely (L), 3 = Moderately Likely (ML), 2 = Moderately Unlikely (MU), 1 = Unlikely (U)

3. Expected Outputs and deliverables

#	Deliverable	Description	Timing	Responsibilities
1	TE Inception Report	TE team clarifies objectives, methodology and timing of the TE	By 30 July2022	TE team submits Inception Report to Commissioning Unit and project management
2	Presentation	Initial Findings	By 15 August	TE team presents to Commissioning Unit and project management
3	Draft TE Report	Full draft report *(using guidelines on report content in ToR Annex C)* with annexes	By 20 August	TE team submits to Commissioning Unit; reviewed by BPPS-GEF RTA, Project Coordinating Unit, GEF OFP
5	Final TE Report* + Audit Trail	Revised final report and TE Audit trail in which the TE details how all received comments have (and have not) been addressed in the final TE report *(See template in ToR Annex H)*	By 30 August	TE team submits both documents to the Commissioning Unit

4. Institutional arrangements/reporting lines

The principal responsibility for managing the TE resides with the Commissioning Unit. The Commissioning Unit for this project's TE is *the UNDP Pacific Office*

The Commissioning Unit will contract the evaluators and ensure the timely provision of per diems and travel arrangements within the country for the TE team. The Project Team will be responsible for liaising with the TE team to provide all relevant documents, set up stakeholder interviews, and arrange field visits.

A team of *two independent evaluators* will conduct the TE – *one team leader (with experience and exposure to projects and evaluations in other regions) and one National consultant expert*. The team leader will *be responsible for the overall design and writing of the TE report.* The National consultant is expected to work under the supervision of Team Leader.

The evaluator(s) cannot have participated in the project preparation, formulation and/or implementation (including the writing of the project document), must not have conducted this project's Mid-Term Review and should not have a conflict of interest with the project's related activities.

5. Experience and qualifications

I. Academic Qualifications:

II. Years of experience:
Master's degree in Environmental Management/Science, Natural Resource Management or equivalent

III. Language:
- Fluency in written and spoken English.

IV. Competencies:

- Relevant experience with results-based management evaluation methodologies;
- Experience applying SMART indicators and reconstructing or validating baseline scenarios;
- Competence in adaptive management, as applied to Biodiversity, Land Degradation and;
- Experience in evaluating projects as Team Leader is essential ;
- Experience working in Small Island developing States, in particular Micronesia or the FSM ;
- Experience in relevant technical areas for at least 10 years;
- Demonstrated understanding of issues related to gender and Biodiversity and Land Degradation);
- Experience in gender responsive evaluation and analysis;
- Excellent communication skills;
- Demonstrable analytical skills;
- Project evaluation/review experience within United Nations system will be considered an is essential
- Experience with implementing evaluations remotely will be considered an asset.

6. Payment Modality

40% payment upon satisfactory delivery of the final TE report and approval by the Commissioning Unit and RTA (via signatures on the TE Report Clearance Form) and delivery of completed TE Audit Trail by 10 September, 2022

Criteria for issuing the final payment of 40%:

- The final TE report includes all requirements outlined in the TE TOR and is in accordance with the TE guidance.
- The final TE report is clearly written, logically organized, and is specific for this project (i.e. text has not been cut & pasted from other TE reports).
- The Audit Trail includes responses to and justification for each comment listed.

In line with the UNDP's financial regulations, when determined by the Commissioning Unit and/or the consultant that a deliverable or service cannot be satisfactorily completed due to the impact of COVID-19 and limitations to the TE, that deliverable or service will not be paid.

Due to the current COVID-19 situation and its implications, a partial payment may be considered if the consultant invested time towards the deliverable but was unable to complete to circumstances beyond his/her control.

APPENDIX B - MISSION ITINERARY (FOR SEPTEMBER-OCTOBER 2022)

#	Activity	Stakeholder involved	Place
24 August 2022 (Wednesday)			
1	FSM-R2R Kick-off meeting	UNDP and PIU	Zoom
30 August 2022 (Tuesday)			
2	De-brief with PIU	PIU	Zoom
31 August 2022 (Wednesday)			
3	Second de-brief with PIU	PIU	Zoom
21 September 2022 (Wednesday)			
4	Third de-brief with PIU	PIU	Zoom
27 September 2022 (Tuesday)			
5	Fourth de-brief with PIU	PIU	Zoom
12 October 2022 (Wednesday)			
6	Interviews with stakeholders	National and Yap Governments	Zoom
17 October 2022 (Monday)			
7	Interviews with stakeholders	Yap State Government	Zoom
18 October 2022 (Tuesday)			
8	Interviews with stakeholders	Pohnpei EPA and NGOs	Zoom
20 October 2022 (Thursday)			
9	Interviews with stakeholders	Kosrae State Government	Zoom
10	Interviews with stakeholders	Chuuk Women's Council	Zoom
24 October 2022 (Monday)			
11	Interviews with stakeholders	FSM National Government	Zoom
27 October 2022 (Thursday)			
12	Fifth de-brief with PIU	PIU	Zoom
16 November 2022 (Wednesday)			
13	Sixth de-brief with PIU	PIU	Zoom
1 December 2022 (Thursday)			
14	Seventh de-brief with PIU	PIU	Zoom
19 December 2022 (Monday)			
15	De-brief with UNDP	UNDP	Zoom

Total number of meetings conducted: 15

APPENDIX C - LIST OF PERSONS INTERVIEWED

This is a listing of persons contacted in the FSM-R2R Team (unless otherwise noted) during the Terminal Evaluation Period only. The Evaluators regrets any omissions to this list.

1. Ms. Merewalesi Laveti, Monitoring, Evaluation and Country Coordination, Pacific Office in Fiji, UNDP;

2. Ms. Rosalinda Yatilman, Project Manager, FSM-R2R Project;

3. Ms. Rachael Nash, Technical Coordinator, FSM-R2R Project;

4. Mr. Wisney Nakayama, Senator, Chuuk State Senate;

5. Mr. Curtis Graham, Local Independent Consultant;

6. Ms. Cindy Ehmes, Chairperson, Department of Environment, Climate Change and Emergency Management (DECEM);

7. Ms. Christina Fillmed, Member Steering Committee, Yap Environmental Protection Agency;

8. Mr. Anthony Yalon, Chief, Marine Resources & Management Division, R&D;

9. Mr. Jonathan F. Fathal, Project Manager, Gachpar Marine Protected Area;

10. Mr. Francisco Celestine, Director, Pohnpei Environmental Protection Agency;

11. Mr. Mark Johnny, President, Sokehs Menen Katengensed;

12. Mr. Jerry Route, MPA Network Coordinator, CSP;

13. Mr. Bond Segal, PAN Coordinator, KIRMA;

14. Ms. Mary Rose, President, Chuuk Women's Council.

APPENDIX D - LIST OF DOCUMENTS REVIEWED

1. UNDP-GEF Project Document for "Implementing an integrated 'Ridge to Reef' approach to enhance ecosystem services, to conserve globally important biodiversity and to sustain local livelihoods in the Federated States of Micronesia" (FSM R2R);

2. CEO Endorsement Document for "Implementing an integrated 'Ridge to Reef' approach to enhance ecosystem services, to conserve globally important biodiversity and to sustain local livelihoods in the Federated States of Micronesia" (FSM R2R);

3. Federated States of Micronesia Ridge to Reef Project - Inception workshop Report, December 2016;

4. UNDP-GEF PIF for "Securing Climate-Resilient Sustainable Land Management and Progress Towards Land Degradation Neutrality in the Federated States of Micronesia", September 2021;

5. 2017-2021 PIRs;

6. "Implementing a Strategic Environmental Assessment (SEA) in small Pacific islands: lessons learned from the FSM Ridge to Reef project in Pohnpei, Federated States of Micronesia, R2R Project report;

7. "Strengthening Protected Area Management through effective community participation in the Federated States of Micronesia: Lessons learned from the FSM Ridge to Reef project", R2R Project report;

8. MTR Report on "Implementing an integrated 'Ridge to Reef' approach to enhance ecosystem services, to conserve globally important biodiversity and to sustain local livelihoods in the Federated States of Micronesia" (FSM R2R), July 2019;

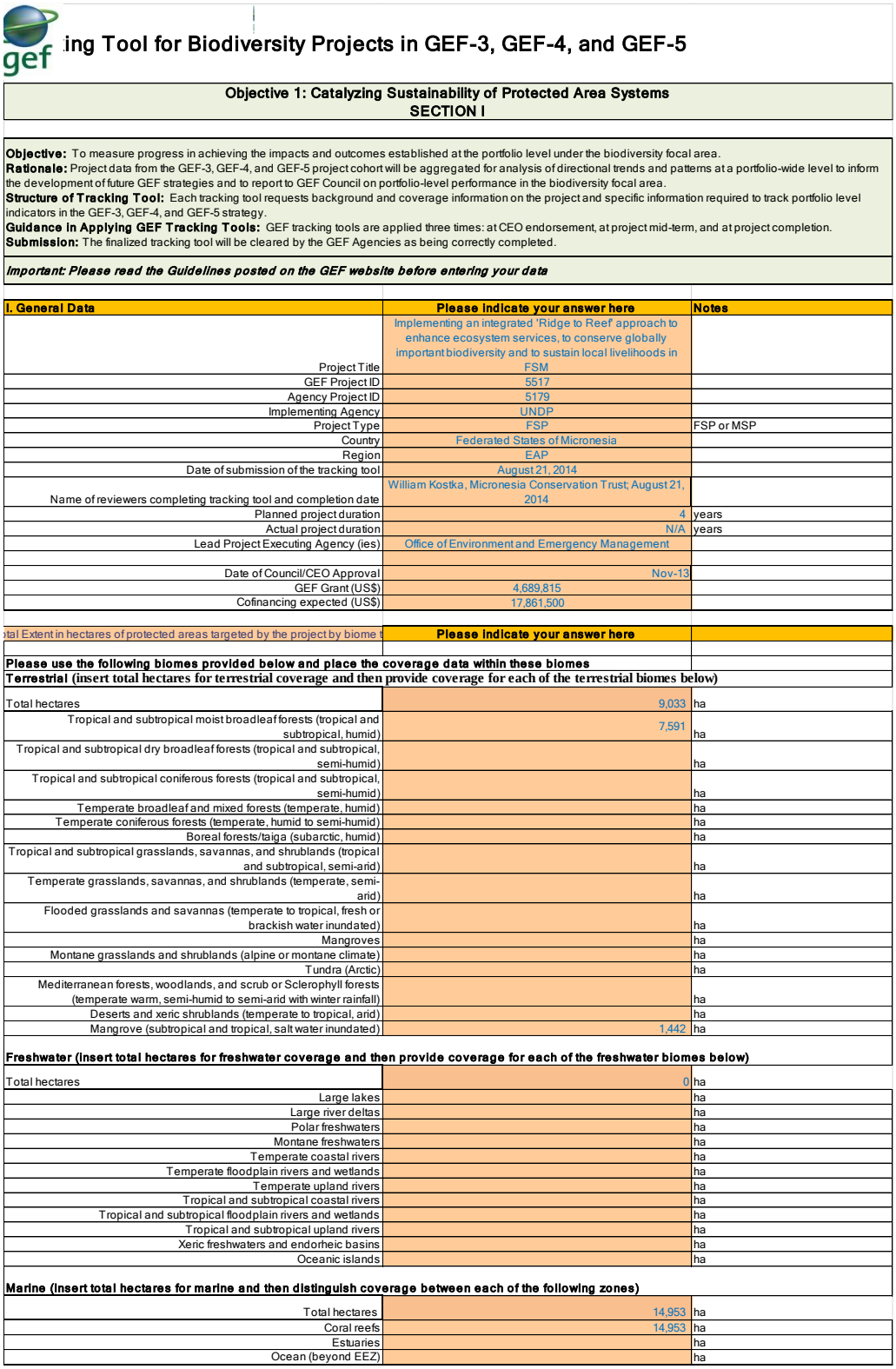
9. UNDP-GEF MTR Management Response to R2R Project, August 2019;

10. SC meeting minutes for 2019, 2020, 2021 and 2022;

11. United Nations Pacific Strategy 2018-2022.

APPENDIX E - COMPLETED TRACKING TOOL

Figure E-1: Screenshot of Summary Page of FSM-R2R Project Biodiversity Tracking Tool



ing Tool for Biodiversity Projects in GEF-3, GEF-4, and GEF-5

Objective 1: Catalyzing Sustainability of Protected Area Systems
SECTION I

Objective: To measure progress in achieving the impacts and outcomes established at the portfolio level under the biodiversity focal area.
Rationale: Project data from the GEF-3, GEF-4, and GEF-5 project cohort will be aggregated for analysis of directional trends and patterns at a portfolio-wide level to inform the development of future GEF strategies and to report to GEF Council on portfolio-level performance in the biodiversity focal area.
Structure of Tracking Tool: Each tracking tool requests background and coverage information on the project and specific information required to track portfolio level indicators in the GEF-3, GEF-4, and GEF-5 strategy.
Guidance in Applying GEF Tracking Tools: GEF tracking tools are applied three times: at CEO endorsement, at project mid-term, and at project completion.
Submission: The finalized tracking tool will be cleared by the GEF Agencies as being correctly completed.

Important: Please read the Guidelines posted on the GEF website before entering your data

I. General Data	Please indicate your answer here	Notes
Project Title	Implementing an integrated 'Ridge to Reef' approach to enhance ecosystem services, to conserve globally important biodiversity and to sustain local livelihoods in FSM	
GEF Project ID	5517	
Agency Project ID	5179	
Implementing Agency	UNDP	
Project Type	FSP	FSP or MSP
Country	Federated States of Micronesia	
Region	EAP	
Date of submission of the tracking tool	August 21, 2014	
Name of reviewers completing tracking tool and completion date	William Kostka, Micronesia Conservation Trust; August 21, 2014	
Planned project duration	4	years
Actual project duration	N/A	years
Lead Project Executing Agency (ies)	Office of Environment and Emergency Management	
Date of Council/CEO Approval	Nov-13	
GEF Grant (US$)	4,689,815	
Cofinancing expected (US$)	17,861,500	

tal Extent in hectares of protected areas targeted by the project by biome t	Please indicate your answer here	
Please use the following biomes provided below and place the coverage data within these biomes		
Terrestrial (insert total hectares for terrestrial coverage and then provide coverage for each of the terrestrial biomes below)		
Total hectares	9,033	ha
Tropical and subtropical moist broadleaf forests (tropical and subtropical, humid)	7,591	ha
Tropical and subtropical dry broadleaf forests (tropical and subtropical, semi-humid)		ha
Tropical and subtropical coniferous forests (tropical and subtropical, semi-humid)		ha
Temperate broadleaf and mixed forests (temperate, humid)		ha
Temperate coniferous forests (temperate, humid to semi-humid)		ha
Boreal forests/taiga (subarctic, humid)		ha
Tropical and subtropical grasslands, savannas, and shrublands (tropical and subtropical, semi-arid)		ha
Temperate grasslands, savannas, and shrublands (temperate, semi-arid)		ha
Flooded grasslands and savannas (temperate to tropical, fresh or brackish water inundated)		ha
Mangroves		ha
Montane grasslands and shrublands (alpine or montane climate)		ha
Tundra (Arctic)		ha
Mediterranean forests, woodlands, and scrub or Sclerophyll forests (temperate warm, semi-humid to semi-arid with winter rainfall)		ha
Deserts and xeric shrublands (temperate to tropical, arid)		ha
Mangrove (subtropical and tropical, salt water inundated)	1,442	ha
Freshwater (insert total hectares for freshwater coverage and then provide coverage for each of the freshwater biomes below)		
Total hectares	0	ha
Large lakes		ha
Large river deltas		ha
Polar freshwaters		ha
Montane freshwaters		ha
Temperate coastal rivers		ha
Temperate floodplain rivers and wetlands		ha
Temperate upland rivers		ha
Tropical and subtropical coastal rivers		ha
Tropical and subtropical floodplain rivers and wetlands		ha
Tropical and subtropical upland rivers		ha
Xeric freshwaters and endorheic basins		ha
Oceanic islands		ha
Marine (insert total hectares for marine and then distinguish coverage between each of the following zones)		
Total hectares	14,953	ha
Coral reefs	14,953	ha
Estuaries		ha
Ocean (beyond EEZ)		ha

Figure E-2: Screenshot of METT Scores of FSM-R2R Project Biodiversity Tracking Tool

Summary of METT Scores and Comparisons 2015 vs 2018

	2015	2018-2019			2015	2018
Pohnpei State						
Mwand	73	68		Mwand	73	68
Depehk- Takaieu	73	71		Depehk- Takaieu	73	71
Senpehn Mangrove Reserve	58	63		Senpehn Mangrove Reserve	58	63
Namwen Na	58	55		Namwen Na	58	55
Namwen Nangih	58	58		Namwen Nangih	58	58
Nanwap Marine	80	74		Nanwap Marine	80	74
Nahtik	73	71		Nahtik	73	71
Peniou Island	31	28		Peniou Island	31	28
Enipein Mangrove Reserve	73	68		Enipein Mangrove Reserve	73	68
Kehpara Marine	50	59		Kehpara Marine	50	59
Sapwitik Marine	73	76		Sapwitik Marine	73	76
Pwudoi Mangrove Reserve	58	38		Pwudoi Mangrove Reserve	58	38
Pohnpei Watershed P1	68	68		Pohnpei Watershed P1	68	68
Awak Watershed Reserve	32	24	9	Awak Watershed Reserve	32	24
Palikir Pass	31	61	4	Palikir Pass	31	61
Pohnpei Watershed P2	67	67	3	Pohnpei Watershed P2	67	67
			16	**AVG**	**59.75**	**59.3125**
Kosrae State				**Kosrae State**	2015	2018
Utwe	79	79		Utwe	79	79
Tukunsruh	64	64		Tukunsruh	64	64
Awane	73	73		Awane	73	73
Tofol Watershed	64	64		Tofol Watershed	64	64
Tafunsak	75	75		Tafunsak	75	75
Pikensukar	33	33		Pikensukar	33	33
Olum Watershed Area	62	62		Olum Watershed Area	62	62
Kuuplu Mangrove Reserve	64	64		Kuuplu Mangrove Reserve	64	64
Yela Ka Forest	76	76		Yela Ka Forest	76	76
Tukasungai	71	71	10	Tukasungai	71	71
			10	**AVG**	**66.1**	**66.1**
Chuuk State				**Chuuk State**	2015	2018
Witipon	29	30		Witipon	29	30
UFO	43	44		UFO	43	44
Parem	64	62		Parem	64	62
Oror - SOU	30	37		Oror - SOU	30	37
Mwanukun & Neoch	50	53	4	Mwanukun & Neoch	50	53
Winifurer	36	36		Winifurer	36	36
Wichukuno	36	34	2	Wichukuno	36	34
Winipot	28	28	2	Winipot	28	28
			8	**AVG**	**39.5**	**40.5**
Yap State				Yap State	2015	2018
Nimpal Channel	74	74		Nimpal Channel	74	74
Riken	53	59		Riken	53	59
Tamil	61	68		Tamil	61	68
Reey	42	44		Reey	42	44
Gargey Village T'olo	32	32		Gargey Village T'olo	32	32
Gargey Village Fat' earcheng Hill	30	30		Gargey Village Fat' earcheng Hill	30	30
			6	AVG	**48.6666667**	**51.1666667**
Total Scores	2225	2241				
Overall AVG	**55.63**	**56.025**				

State	Sample Size (N)	Avg. 2015	Avg. 2018	No change	Increased METT	Decreased METT	% PAs > 65% score
Pohnpei	16	59.8	59.3	3	4	9 (50%)	44%
Kosrae[52]	10	66.1	66.1	10	0	2 (2%)	50%
Chuuk	8	39.5	30.5	2	4	2 (2.5%)	0%
Yap	6	48.7	51.2	3	3	2 (2.5%)	33%
ALL	**40**	**55.6**	**56.0**	**18**	**11**	**15**	**38%**

Table 3: Comparison of METT Scores from 2015 and 2018.

Figure E-3: Screenshot of Page 1 of FSM-R2R Project International Waters Tracking Tool

GEF International Waters Tracking Tool

NOTE: Please address all boxes colored blue		GEF Project ID: 5517	GEF Implementing Agency: UNDP
		Project Title: Implementing an integrated "Ridge to Reef" approach to enhance ecosystem services, to conserve globally important biodiversity and to sustain local livelihoods in the FSM	
Select GEF Replenishment:	GEF-5	GEF Allocation ($USD): $4,689,815	Federated States of Micronesia

A PROCESS INDICATORS

Select project's Operational Program(s), Strategic Program(s), or objective(s) below. If multiple OP/SP/Obj is appropriate for a given indicator then select "Multiple" from the dropdown list:

	Indicators	OP/SP/Obj 1				Notes:	Ratings
		Scroll down menu of ratings					
1	Regional legal agreements and cooperation frameworks	N/A					1 = No legal agreement/cooperation framework in place 2 = Regional legal agreement negotiated but not yet signed 3 = Countries signed legal agreement 4 = Legal agreement ratified and entered into force
2	Regional management institutions (RMI)	N/A					1 = No RMI in place 2 = RMI established but functioning with limited effectiveness, < 50% countries contributing dues 3 = RMI established and functioning, >50% of countries contributing dues 4 = RMI in place, fully functioning and fully sustained by at or near 100% country contributions
3	Management measures in ABNJ incorporated in Global/Regional Management Organizations (RMI) institutional/ management frameworks	N/A					1 = No management measures in ABNJ in (RMI) institutional/ management frameworks 2 = Management measures in ABNJ designed but not formally adopted by project participants 3 = Management measures in ABNJ formally adopted by project participants but not incorporated in RMI institutional/management frameworks 4 = Management measures in ABNJ fully incorporated in RMI institutional/ management frameworks
4	National Inter-Ministry Committees (IMCs)	N/A					1 = No IMCs established 2 = IMCs established and functioning, < 50% countries participating 3 = IMCs established and functioning, > 50% countries participating 4 = IMCs established, functioning and formalized thru legal and/or institutional arrangements, in most participating countries
5	National/Local reforms	2				Provision for catchment demarcation / conservation is provided for in Pohnpei State PA legislation. The other 3 States do not have designated watersheds. Limited legal mechanisms for water resource management exist. PA law under review and this project is making provision for full review of this legislation. Land Use codes have limited reference to water reource management and no enforcement. Watersheds to be identified nationally through SEA process.	1 = No national/local reforms drafted 2 = National/ local reforms drafted but not yet adopted 3 = National/legal reform adopted with technical/enforcement mechanism in place 4 = National/ legal reforms implemented
6	Transboundary Diagnostic Analysis (TDA): Agreement on transboundary priorities and root causes	N/A					1 = No progress on TDA 2 = Priority TB issues identified and agreed on but based on limited effect information; inadequate root cause analysis 3 = Priority TB issues agreed on based on solid baseline effect info; root cause analysis is inadequate 4 = Regional agreement on priority TB issues drawn from valid effect baseline, immediate and root causes properly determined
7	Revised Transboundary Diagnostic Analysis (TDA)/Strategic Action Program (SAP) including Climatic Variability and Change considerations	N/A					1 = No revised TDA or SAP 2 = TDA updated to incorporate climate variability and change 3 = revised SAP prepared including Climatic Variability and Change 4= SAP including Climatic Variability and Change adopted by all involved countries
8	TDA based on multi-national, interdisciplinary technical and scientific (MNITS) activities	N/A					1 = TDA does not include technical annex based on MNITS actives 2 = MNITS committee established and contributed to the TDA development 3 = TDA includes technical annex, documenting data and analysis being collected 4 = TDA includes technical annex posted IWLEARN and based on MNITS committee inputs
9	Development of Strategic Action Plan (SAP)	N/A					1 = No development of SAP 2 = SAP developed addressing key TB concerns spatially 3 = SAP developed and adopted by ministers 4 = Adoption of SAP into National Action Plans (NAPs)
10	Proportion of Countries that have adopted SAP	N/A					Number of countries adopted SAP / total number of countries - e.g.. 3 countries adopted /10 total countries in project, so 3/10
11	Proportion of countries that are implementing specific measures from the SAP (i.e. adopted national policies, laws	N/A					Number of countries implementing adopted SAP / total number of countries - e.g.. 3 countries implementing /10 total countries in project, so 3/10
12	Incorporation of (SAP, etc.) priorities with clear commitments and time frames into CAS, PRSPs, UN Frameworks, UNDAF, key agency strategic documents including financial commitments and time frames, etc	N/A					1 = No progress 2 = Limited progress, very generic with no specific agency/government(s) commitments 3 = Priorities specifically incorporated into some national development/assistance frameworks with clear agency/government(s) commitments and time frames for achievement 4 = Majority of national development/assistance frameworks have incorporated priorities with clear agency/government(s) commitments and time frames for achievement

Figure E-4: Screenshot of Page 2 of FSM-R2R Project International Waters Tracking Tool

B	STRESS REDUCTION INDICATORS			
	Indicators	*Scroll down menu of ratings*		Ratings
13	Are there mechanisms in place to produce a monitoring report on stress reduction measures?	1	No operational SLM monitoring programmes iin place	1 = No mechanisms in place to monitor/report change 2 = Some national/regional monitoring mechanisms, but they do not satisfy the project related indicators. 3 = monitoring mechanisms in place for some of the project related indicators 4 = Mechanisms in place and sustainable for long-term monitoring
14	Stress reduction measurements incorporated by project under management of:	*Choose Management Mechanism from list below:*	*Please specify the area currently under protection out of total area identified by project below (e.g. 10,000/100,000 Ha):*	Management Mechanisms: 1 = Integrated Water/River Resource Management (Watershed, lakes, aquifers) 2 = Integrated Coastal Management (Coast) 3 = Marine Spatial Planning (Marine) 4 = Marine Protected areas (Fisheries/ABNJ)
		1	2330/62133	
15	*Please specify the types of technologies and measures implemented in local investments (Column D) and their respective results (Column I):*			
	Local investment #1	*Stress Reduction Measurements (Choose up to five)*		*Please enter amount/value of respective stress reduction below:*

		3	1 = Municipal wastewater pollution reduction - N, P & BOD (kg/yr)
			2 = Industrial wastewater pollution reduction - pollutant; estimated kg/yr
			3 = Agriculture pollution reduction practices - ha of practices; estimate of N, P & BOD kg/yr
			4 = Restored habitat, including wetlands - ha restored
			5 = Conserved/protected wetland, MPAs, and fish refugia habitat - ha applied
			6 = Reduced fishing pressure - tons/yr reduction; % reduction in fleet size
			7 = Improved use of fish gear/techniques - % vessels applying improved gear/techniques
			8 = Water use efficiency measures - m^3/yr water saved
			9 = Improved irrigation practices - m^3/ha/yr water saved
			10 = Alternative livelihoods introduced - # people provided alternative livelihoods
			11 = Catchment protection measures - ha under improved catchment management
			12 = Aquifer pumping reduction - m^3/yr water saved
			13 = Aquifer recharge area protection - ha protected
			14 = Pollution reduction to aquifers - kg/ha/year reduction
			15 = Invasive species reduction - ha and/or #'s of targeted area
			16 = Other - please specify in box below
				200 ha

		11		62133 ha
		3. Adoption of dry litter piggery technology in target water catchments will reduce agricultural pollution measured through E. coli and Leptospirosus counts. No baseline WRT N/P has been established. 11. Development and implementation of SEAs and landuse plans for all High Islands will translate R2R principles into clear maps for landuse planning and decision making accompanied by landuse guidelines that give practical effect to biodiversity conservation and natural resource management principles. Central to these principles are water management issues and the identification of water catchments throughout the FSM. The baseline of 2330 includes only the currently formally proclaimed watercatchment protected area in Pohnpei. This formaly protected area will increase by 4012ha through the project.		
	Local investment #2	*Stress Reduction Measurements (Choose up to five)*		*Please enter amount/value of respective stress reduction below:*

			1 = Municipal wastewater pollution reduction - N, P & BOD (kg/yr)
			2 = Industrial wastewater pollution reduction - pollutant; estimated kg/yr
			3 = Agriculture pollution reduction practices - ha of practices; estimate of N, P & BOD kg/yr
			4 = Restored habitat, including wetlands - ha restored
			5 = Conserved/protected wetland, MPAs, and fish refugia habitat - ha applied
			6 = Reduced fishing pressure - tons/yr reduction; % reduction in fleet size
			7 = Improved use of fish gear/techniques - % vessels applying improved gear/techniques
			8 = Water use efficiency measures - m^3/yr water saved
			9 = Improved irrigation practices - m^3/ha/yr water saved
			10 = Alternative livelihoods introduced - # people provided alternative livelihoods
			11 = Catchment protection measures - ha under improved catchment management
			12 = Aquifer pumping reduction - m^3/yr water saved
			13 = Aquifer recharge area protection - ha protected
			14 = Pollution reduction to aquifers - kg/ha/year reduction
			15 = Invasive species reduction - ha and/or #'s of targeted area
			16 = Other - please specify in box below	

		Briefly describe investment in a 100 words or less:		
	Local investment #3	*Stress Reduction Measurements (Choose up to five)*		*Please enter amount/value of respective stress reduction below:*

			1 = Municipal wastewater pollution reduction - N, P & BOD (kg/yr)
			2 = Industrial wastewater pollution reduction - pollutant; estimated kg/yr
			3 = Agriculture pollution reduction practices - ha of practices; estimate of N, P & BOD kg/yr
			4 = Restored habitat, including wetlands - ha restored
			5 = Conserved/protected wetland, MPAs, and fish refugia habitat - ha applied
			6 = Reduced fishing pressure - tons/yr reduction; % reduction in fleet size
			7 = Improved use of fish gear/techniques - % vessels applying improved gear/techniques
			8 = Water use efficiency measures - m^3/yr water saved
			9 = Improved irrigation practices - m^3/ha/yr water saved
			10 = Alternative livelihoods introduced - # people provided alternative livelihoods
			11 = Catchment protection measures - ha under improved catchment management
			12 = Aquifer pumping reduction - m^3/yr water saved
			13 = Aquifer recharge area protection - ha protected
			14 = Pollution reduction to aquifers - kg/ha/year reduction
			15 = Invasive species reduction - ha and/or #'s of targeted area
			16 = Other - please specify in box below	

		Briefly describe investment in a 100 words or less:		
		NOTE: If the project has more than three local investments, please fill out the Annex A found in the worksheet tabs below.		

Figure E-5: Screenshot of Page 3 of FSM-R2R Project International Waters Tracking Tool

C	WATER, ENVIRONMENTAL & SOCIOECONOMIC STATUS Indicators			
	Indicators	*Scroll down menu of ratings*		Ratings
16	Are there mechanisms and project indicators in place to monitor the environmental and socioeconomic status of the waterbody?	3	Provision has been made to monitor water quality in project sites for life of project.	1 = No mechanisms in place 2 = Some national/regional monitoring mechanisms, but they do not satisfy the project related indicators. 3 = Monitoring mechanisms in place for some of the project related indicators 4 = Mechanisms in place for project related indicators and sustainable for long-term monitoring
D	**IW:LEARN Indicators**			
	Indicators	*Scroll down menu of ratings*		Ratings
17	Participation in IW events (GEF IWC, Community of Practice (COP), IW:LEARN)	1		1 = No participation 2 = Documentation of minimum 1 event or limited COP participation 3 = Strong participation in COPs and in IWC 4 = Presentations with booth participation and hosting of staff/twinning
18	Project website (according to IW:LEARN guidelines)	1		1 = No project website 2 = Website not in line with IW:LEARN guidelines, not regularly updated 3 = Website in line with IW:LEARN guidelines, not regularly updated 4 = Website in line with IW:LEARN guidelines, regularly updated
			Date Completed:	2022-12-21

Figure E-6: Screenshot of Pages 1 and 2 of FSM-R2R Project Land Degradation Tracking Tool

Guidance on Scores

Scores to be included into the LD PMAT (heading numbers refer to numbers for section on Outcomes and Adaptive Management)

PART II - PROJECT OUTCOMES AND ADAPTIVE MANAGEMENT

LD1 – Ecosystem services in production landscapes (agriculture, rangeland)

LD1.i Agriculture policy enhancement score

Rating		Benchmark	Notes
	1	no sector policy/regulation framework in place	Baseline
	2	sector policy/regulation framework has been discussed and	assessment
	3	sector policy/regulation framework have been formally	made during
	4	sector policy/regulation framework formaly adopted by the	project design
	5	sector policy/regulation framework are enforced	and planning

LD1.i Land tenure security of affected farmers / communities

Rating		Benchmark	Notes
	1	No land tenure arrangements and use rights in place	Baseline
	2	Land tenure arrangements and use rights partially in place	assessment
	3	Land tenure arrangements and use rights in place	made during
	4	Land tenure and use rights effectively in place	project design
	5	Land tenure and use rights secured and protected over the	and planning

LD1.ii Sustained agricultural productivity score

Rating		Benchmark	Notes
	1	Yields of main crops / livestock productivity decreased	Available data
	2	Yields of main crops / livestock productivity stable	on yields of
	3	Yields of main crops / livestock productivity with annual	main crops /
	4	Yields of main crops / livestock productivity with >2years	livestock
	5	Yields of main crops / livestock productivity with increases	productivity

LD1. ii. Rate local population's perception of the vulnerability of their livelihood			Annual
	1	Extreme Vulnerability	assessment
	2	High Vulnerability	(preferably
	3	Medium Vulnerability	from
	4	Low Vulnerability	participatory
	5	No Vulnerability	household

LD2 - Ecosystem services in forest landscapes

LD2.i Forest policy enhancement score

Rating		Benchmark	Notes
	1	no sector policy/regulation framework in place	Baseline
	2	sector policy/regulation framework has been discussed and	assessment
	3	sector policy/regulation framework have been formally	made during
	4	sector policy/regulation framework formaly adopted by the	project design
	5	sector policy/regulation framework are enforced	and planning

LD3 - SLM in wider landscapes (integrated management)

LD3.i Framework strengthening INRM

Rating		Benchmark	Notes
	1	no INRM framework in place	Baseline
	2	INRM framework has been discussed and formally proposed	assessment
	3	INRM framework have been formally proposed but not	made during
	4	INRM framework formaly adopted by stakeholders but weak	project design
	5	INRM framework is enforced	and planning

LD3.i Capacity strengthening to enhance cross-sector enabling environment

Rating		Benchmark	Notes
	1	No capacity built	Baseline
	2	Initial awarenes raised (e.g. workshops, seminars)	assessment
	3	Cross-sectoral training courses addressing cross-sectoral	made during
	4	Knowledge effectively transferred (e.g. working groups tackle	project design
	5	Application of enhanced capacity demonstrated (framework,	and planning

APPENDIX F - STRATEGIC RESULTS FRAMEWORK FOR FSM R2R PROJECT (EDITS IN YELLOW FROM JUNE 2020 REVISION)

This project will contribute to achieving the following Sub-regional Programme Document for the Pacific Island Countries and Territories (SRPD) Outcome: Improved resilience of PICTs, with a particular focus on communities, through the integrated implementation of sustainable environmental management, climate change adaptation and/or mitigation and disaster risk management
SRPD Outcome Indicators: 1. Capacities of local government departments are strengthened for effective, participatory environmental governance. 2. Demonstration projects on natural resources management and biodiversity at the community level that can be scaled up are implemented, and the formulation of evidence-based policies is supported.
Country Programme Outcome Indicators: *Area of terrestrial and marine ecosystems under improved management or heightened conservation status increased by 50 per cent by end of 2016*
UNDP Strategic Plan Primary Outcome: (From UNDP Strategic Plan 2014-2017)Outcome 1: Growth and development are inclusive and sustainable, incorporating productive capacities that create employment and livelihoods for the poor and excluded.
Applicable GEF Strategic Objective and Program: *BD1 Improve the sustainability of Protected Area Systems* *LD3 Reduce pressures on natural resources from competing land uses in the wider landscape* *IW1 Catalyse multi-state cooperation to balance conflicting water users in trans-boundary surface and groundwater basins while considering climate variability and change*
Applicable GEF Expected Outcomes: *BD1.1 Improved management of existing and new protected areas* *LD3.2 Integrated landscape management practices adopted by local communities* *IW1.3 Innovative solutions implemented for reduced pollution, improved water use efficiency, sustainable fisheries with right-based management, IWRM, water supply protection in SIDS, and aquifer and catchment protection*
Applicable GEF Outcome Indicators: *BD1.1* Protected area management effectiveness score as recorded by Management Effectiveness Tracking Tool: Average METT score for 27 existing and 13 new PAs (40 total) increased by an average of 10% *LD3.2* Application of integrated natural resource management (INRM) practices in wider landscapes: ILMPs developed and implemented for 4 pilot sites (1 in each State) in the FSM. *IW1.3* Measurable water related results from local demonstrations: 5 % of piggeries in each state practicing dry litter system

Objective and Outcomes	Indicator	Baseline	Targets End of Project	Source of information	Comments	Risks and Assumptions
Project Objective[62] To strengthen local, State and National capacities and actions to implement integrated ecosystem-based management through	Area of High Islands of the FSM where pressures from competing land uses are reduced (measured by no net loss of intact forests) through the implementation of Pohnpei IEMP, Kosrae Land use Plan, Weloy (Yap) and	(i) 0 ha Covered by ILMPs (some land use and stewardship plans developed,	(i) 62,133 ha	Project Reports and documentation related to land use planning. Report against the plans that are developed under R2R	Target too ambitious. Project target is approximately the exact total land area of all 6 High Islands targeted under the R2R project. Therefore, it is highly unlikely that the project can reduce competing land-uses on all 6 islands within its given timeframe	**Assumptions:** Government remains committed to investing in SLM & biodiversity conservation and give their full support to implementing the ILMPs and establishing the PAs

[62] *Objective (Atlas output) monitored quarterly ERBM and annually in APR/PIR*

Objective and Outcomes	Indicator	Baseline	Targets End of Project	Source of information	Comments	Risks and Assumptions
"ridge to reef" approach on the High Islands of the four States of the FS.	Sapo, Oror and Ununo (SOU, Chuuk) Stewardship Plans	but not being implemented) 63 (ii)Area of intact forest within the High Islands (6,213 ha) (Baseline established using the estimate that intact forest at baseline equaled roughly 10% of the area of the high islands)	 (ii) No net loss of intact forest against the baseline	and the area that the plans cover.	including the amount of time it will take to develop and implement IEMPs for each of the States. The Area of intact forest equals 10% of intact forest in the watersheds across the 4 states.	Stakeholder institutions are engaged by the project and engage constructively in project activities. Government is committed to working with all stakeholders both nationally and in the region. **Risks:** Mainstreaming SLM and biodiversity conservation into landscape-level development plans and other existing frameworks hindered by competing government/ social priorities. The effects of climate change degrade conservation value of ecosystems and PAs. Poor resilience of ecosystems and species to the effects of invasive species and climate change. Extreme climatic events result in catastrophic loss of ecosystems (e.g.
	(i) Average of METT Scores for 40 target PAs covering 24,986 ha and (ii) 20 priority PAs covering 31,877 ha	(i) 55% (ii) 58.5% (part 2014, part 2019)	(i) 65% with no drop in scores in any of the individual PAs (ii) 65% with no drop in scores	Project review of the METT Scorecards	Run METT with all 40 PAs including new PAs. It took nearly 2.5 years to increase the METT scores for the project MPAs from 55% to 56%. Difficult to boost the scores for all PAs because (1) not all sites are active MPAs; (2) there are 40 PAs spread across the 4 States yet only 1-2 agencies are available in each State to assist communities in management plan development, monitoring and enforcement; (3) the amount of time it takes to officially establish an MPA site is too lengthy, let alone the necessary work required to help communities effectively management them; (4) project is not actively implementing management regimes across all forty sites simultaneously, etc.	

[63] The baseline and target for this first indicator was split into two parts i.e. (i) focusing on land use/management plans; and (ii) area of intact forests in the FSM.

Objective and Outcomes	Indicator	Baseline	Targets End of Project	Source of information	Comments	Risks and Assumptions
	Sustainable Land Management Capacity Development Score for FSM	56%	75%	Project review of SLM Capacity Development Scorecard	Capacity scorecard has a lot of emphasis on institutional arrangements, capacity and professional development -- some of which are outside of the control of the project to ensure improvement is made. Other areas of scoring are highly irrelevant.	landslides, coastal flooding/erosion).
	PA Management Capacity Development Score for FSM	50%	70%	Project review of PA Capacity Development Scorecard	Highly likely to operationalize the PAN, however, there are other areas that the project is being scored on which are outside of the control of the project including capacity, enforcement (site level), etc.	
	% of the FSM population, MPA communities, benefitting in the long term from the sustainable management of the fisheries resource which includes providing adequate refugia for sustaining the resource	Unknown	20% [64]	Marine PAs established and adequately managed	Difficult to determine the % of the entire population that is benefitting from long-term. Therefore, project to define what population for each States means for purpose of monitoring project results.	
Outcome 1: Ecosystems Management and Rehabilitation on the High Islands of the FSM to enhance Ridge to Reef Connectivity	**Outputs:** 1.1 Four Integrated Landscape Management Plans (ILMPs), each covering the High Islands of FSM, are developed and implemented for the High Islands of the FSM; 1.2 Institutions with sectoral responsibilities for the development and conservation of the High Islands, together with relevant CSOs and community partners, are capacitated for coordinated action at the wider landscapes on SLM; 1.3 Additional finances for SLM investments (including PA management costs) secured and existing contributions to the environmental sector to support SLM practices aligned; 1.4 Management and rehabilitation of critical ecosystems implemented to enhance functional connectivity, reduce erosion, improve water quantity and quality and reduce coastal flooding.					
	Number of Integrated Environmental Management Plans (IEMP) and Forest	0 draft Integrated Environmental	IEMP for Pohnpei State finalized and implemented, and	Project Reports	Too ambitious and unachievable given the amount of time required and limited budget allocated towards SEA.	**Assumptions:** The National and State governments allocate

[64] Estimated % of the population that are currently (2014) fishers. Fisheries data from Pohnpei as an illustrative example of the number of people that depend on fisheries in and around Pohnpei's marine protected areas. Pohnpei is one of four island states in the FSM, with a population of around 35,000 individuals and approximately 6,000 households. Of these, more than 63 percent of households contain at least one fisher (for a total of 7,227 fishers). These fishers constitute more than 20 percent of the total population. Of this population of fishers, 2,976 are commercial/artisanal and 4,251 are subsistence coral reef fishers (source – Micronesia Challenge biological monitoring/Dr. Kevin Rhodes). While this data is for Pohnpei, the other three states have a similar profile for fishers. It is not unreasonable to extrapolate from this that approximately 20% of the population of the FSM are fishers.

Objective and Outcomes	Indicator	Baseline	Targets End of Project	Source of information	Comments	Risks and Assumptions
	Stewardship Plans being implemented	Management Plan for Pohnpei and Kosrae State; Stewardship Plans for Chuuk and Yap yet to be implemented	providing a model for replication in other States and Pacific Island Countries. Kosrae Land Use Plan updated and implemented At least 2 activities under the Weloy and SOU Forest Stewardship plans implemented	Municipal and State Congress documentation ratifying the ILMPs	Possible to complete Pohnpei's and perhaps explore another State, but it is highly unlikely that the project will achieve completion of four IEMPs.	adequate resources (staff and budget) to fulfil their roles in PAN implementation, SLM and information management Identified role players and stakeholders engage constructively with respect to PAN implementation, SLM and capacity building. **Risks:** ILMPs developed but not implemented by regulatory authorities
	Revival of cross-sector working group for integrated landscape management	0 cross-sector working groups Cross-sector working groups existed in the past in some FSM states, but need to be re-established	Revival of Pohnpei Resource Management Committee, Utwe & Malem resource Management Committees, Yap Environmental Stewardship Consortium and Chuuk Environmental Working Group	Project review of PMAT	Project to set target at Score 4 by establishing working groups at State level aimed to tackle cross-sectoral issues including enhancing environment for landscape management.	
	Annual Government and Donor funding allocated to SLM (including PA management costs)	US$ 9.2 million	At least US$ 10.1 million	Annual National, State and NGO budget allocations		
	Extent (ha) of ecosystems rehabilitated resulting in increased delivery of ecosystem and development benefits: (i) Upland forests (ii) Mangroves & wetlands	(i) 0 hectares (ii) 0 hectares	(i) 30 hectares (ii) 20 hectares	Project reports	Target too ambitious. Majority of lands in the FSM are privately owned, making the target highly challenging. Project to aim at identifying potential sites that are achievable for restoration.	

Objective and Outcomes	Indicator	Baseline	Targets End of Project	Source of information	Comments	Risks and Assumptions
	% of piggeries using the dry litter piggery system within targeted catchments resulting in increased water quality[65]	Pehleng [0%] Dachngar [0%] Tofol-Mutannanea [0%] (Baseline updated to reflect active sites; see also new indicator below)	100%	Project reports	Target is achievable, with current co-financing support for Pohnpei and Kosrae from Compat and IW project. Fewer piggeries in Yap, therefore, also achievable. Chuuk to determine whether DLP is a priority intervention for project site.	
	Maintained/increase water quality in target catchments through measurement of E. Coli (Pohnpei, Kosrae, Yap) and sedimentation (Chuuk).	(i) Pehleng E. Coli baseline] Dachngar [E. coli baseline] Tofol-Mutannanea [of E. coli baseline] (ii) Chuuk [sedimentation rates baseline]	(i) Decrease of E. coli concentration from the baseline (ii) Chuuk: decrease from Sedimentation rates baseline			
Outcome 2: Management Effectiveness enhanced within new	**Outputs:** 1.5 A National and State-level Legal and Institutional Framework have been established to improve management effectiveness of PA's; 1.6 The PAN of the High Islands has been expanded, and existing and new PAs of the have been secured through a review and upgrading of legal protection status (gazetting of all PAs);					

[65] Increase water quality (as well as other assets) as a result of the introduction of dry litter piggery system is confirmed by Fischer, R.D. 2010. Inoculated Deep Litter System. United States Department of Agriculture: *"Because it does not rely on wash downs to move the waste out of the pen and subsequently to a stream or lagoon, the dry litter waste management system eliminates one of the major potential sources of contaminated runoff on the farm. Other attractive benefits: lower water bills and labor costs to the farm because pen washing is virtually eliminated. The dry litter waste management facility produced 10.7 parts per billion hydrogen sulfide levels and 5.0 parts per billion in the production and storage area. The control or conventional wash-down facility had measurements of 54.3 parts per billion and an average of 104.5 parts per billion at the effluent entry to the waste lagoon."*

Objective and Outcomes	Indicator	Baseline	Targets End of Project	Source of information	Comments	Risks and Assumptions
and existing PAs on the High Islands of FSM as part of the R2R approach (both marine and terrestrial)	1.7 Management authorities (state and community) of newly established PAs are equipped and capacitated in managing PAs; 1.8 Effective PA management practices have been adopted in existing and new PAs.					
	Coverage (ha) of statutory PAs in the High Islands (i) PAs gazette status verified (ii) Marine (iii) Terrestrial (iv) Total	(i) Legal status of 0 (0 ha) PAs verified (ii) 3,154 ha (iii) 4,444 ha (iv) 7,598 ha	(i) Legal status of 40 PAs verified - 27 existing and 13 new gazette (ii) 14,953 ha (iii) 10,033 ha (iv) 24,986	Project reports	National PAN register State Congress PA proclamations Recognized by law through legislators Yap and Chuuk recognized by community	**Assumptions:** The National and State governments allocate adequate resources (staff and budget) to fulfil their roles in PAN implemntation, SLM and information management Identified role players and stakeholders engage constructively with respect to PAN implementation, SLM and capacity building. **Risks:** Recommendations from the SEA and ILMP not integrated into PA management plans. Recommended State-level PA law reform not enacted by State governments. National and State role players cannot agree on
	Number of States having a fully operational PA management decision support system in place on which management decisions are based	0	4	Project Reports Management actions		
	Mean % of total fish biomass of (i) *Cheilinus undulates* (EN); and (ii) *Bolbometopon muricatum* (VU) across the States[66]	Chuuk: (i) 1.14% (ii) 0.22% Kosrae: (i) 1.52% (ii) 0.00% Pohnpei: (i) 5.2% (ii) 0.48% Yap: (i) 2.47% (ii) 4.70%	Stable or increasing mean % against baseline at each State	PA monitoring results Project reports	Need to ensure that all sites are being monitored by the CRM conducted in each States. Another option is to explore possible outsourcing of biological monitoring to an NGO	

[66] Methodology and sample sites should be similar to those used by Peter Houk, Unpublished data from FSM Coral Monitoring Programs, University of Guam.

Objective and Outcomes	Indicator	Baseline	Targets End of Project	Source of information	Comments	Risks and Assumptions
	Mean Detection Rate4 of the following birds: (i) Kosrae: Zosteropscinereus (Kosrae White-eye) Endemic (ii) Pohnpei: Myiagrapluto (Pohnpei Flycatcher) Endemic (iii) Chuuk: Metabolusrugensis (Truk Monarch) Endangered (iv) Yap: Monarchagodeffroyi (Yap Monarch) Endemic (v) All States: Duculaoceanica (Micronesian Pigeon) Regionally endemic	(i) 1,846[67] (Baseline to be verified in year 1 of project) (ii) 0.7936 (iii) – (v) Baseline TBD in year 1 of project	Stable or increasing against baseline	PA monitoring Results Project reports	Project to engage Birdlife International in 2020 for bird survey	their respective roles in PAN
	Number of knowledge exchanges via (i) lessons learned disseminated through State wide events and other regional platforms; and (ii) most significant change stories shared nationally and regionally.	0 1	2 4			

[67] Densities (Individuals / Km2) of bird species in mangroves and along an elevation gradient in tropical rainforest of Kosrae in July 1983 (Engbring et al., 1990) reported in Hayes, F.E. and Pratt, H.D. (unpublished manuscript) The Avifauna of Kosrae, Federated States of Micronesia, with Taxonomic Revisions of Endemic Taxa. Mean density calculated excluding the Mangrove habitats:

Species Name	Common Name	Mangroves	0–100m	100–200m	200–400m	400–600m	600-800m	MEAN
Zoster opscinereus	Kosrae White-eye	1,098	2,062	2,000	1,897	1,350	1,981	1,846

APPENDIX G – AUDIT TRAIL

To the comments received on 8 and 14 November 2022 for the Terminal Evaluation of *""Implementing an integrated 'Ridge to Reef' approach to enhance ecosystem services, to conserve globally important biodiversity and to sustain local livelihoods in the Federated States of Micronesia" (FSM R2R), UNDP PIMS ID: 5179,* responses are provided in the following table by institution ("Author" column) and track change comment number ("#" column):

To the comments received on 1 December 2022 for the Terminal Evaluation of *""Implementing an integrated 'Ridge to Reef' approach to enhance ecosystem services, to conserve globally important biodiversity and to sustain local livelihoods in the Federated States of Micronesia" (FSM R2R), UNDP PIMS ID: 5179,* responses are provided in the following table by institution ("Author" column) and track change comment number ("#" column):

APPENDIX H – INTERVIEW QUESTIONS

These questions are designed for all stakeholders:

1. What activities have you or your agency/organization been involved in?

2. Has the project helped improve capacities within communities, government or NGOs? If yes, how?

3. What impact has the Project had on enhanced ridge to reef management, or on enhanced management for PAs in the FSM? What has been the impact on fisheries, mangroves, upland forests, water quality and agro-forestry?

4. What has been the impact of the Project on communities? How has the Project made a difference in your life?

5. Has the Project been effective in influencing national and local policies on the following two areas:
   (i) management and rehabilitation from the ridges to the reefs of FSM; and
   (ii) improving management of PAs (both marine and terrestrial ecosystems)?

6. What were some of the positive or negative changes brought about by the project? Were there delays in implementation or carrying out activities?

7. What were some challenges that the project encountered? Were alternative approaches considered in overcoming these challenges? Were the issues procurement related, COVID-related, on-the-ground related?

8. Were you involved in the planning meeting held in 2019 to review and adjust the project targets? Have you been involved in developing the annual work plan for the project?

9. Have the monitoring and evaluation systems (e.g. annual/quarterly reports, State visits/consultations, TAC/SC meetings, etc.) of the Project helped to ensure that activities and outputs were managed efficiently and effectively?

10. How has the METT helped to guide planning and assessing PA activities?

11. With respect to awareness raising, have newsletters, promotional items, learning exchanges/awareness campaigns and social media platforms informed the general public of Project activities? If yes, which awareness method was most useful?

12. How has the project helped to empower or involve women, youth or other vulnerable groups (disabled people) in Project activities?

13. Do you see any real change in gender equality in the context of decision-making power, and division of labor?

14. After the Project ends, what are the next steps to ensure Ridge to Reef management and PA management are sustained? Does this include appropriate institutional capacities (staff, expertise, etc.) to be in place after the Project's closure date?

15. What has been the impact of the Project on the beneficiaries? How has the Project made a difference in your life?

16. What are the most urgent actions to be taken in view of the Project is ending?

17. Do you see any barriers/risks/challenges that may prevent further progress to the long-term impact of enhance ridge to reef management? -

APPENDIX I - EVALUATION CONSULTANT AGREEMENT FORM

Evaluators:

1. Must present information that is complete and fair in its assessment of strengths and weaknesses so that decisions or actions taken are well founded.
2. Must disclose the full set of evaluation findings along with information on their limitations and have this accessible to all affected by the evaluation with expressed legal rights to receive results.
3. Should protect the anonymity and confidentiality of individual informants. They should provide maximum notice, minimize demands on time, and respect people's right not to engage. Evaluators must respect people's right to provide information in confidence, and must ensure that sensitive information cannot be traced to its source. Evaluators are not expected to evaluate individuals, and must balance an evaluation of management functions with this general principle.
4. Sometimes uncover evidence of wrongdoing while conducting evaluations. Such cases must be reported discreetly to the appropriate investigative body. Evaluators should consult with other relevant oversight entities when there is any doubt about if and how issues should be reported.
5. Should be sensitive to beliefs, manners and customs and act with integrity and honesty in their relations with all stakeholders. In line with the UN Universal Declaration of Human Rights, evaluators must be sensitive to and address issues of discrimination and gender equality. They should avoid offending the dignity and self-respect of those persons with whom they come in contact in the course of the evaluation. Knowing that evaluation might negatively affect the interests of some stakeholders, evaluators should conduct the evaluation and communicate its purpose and results in a way that clearly respects the stakeholders' dignity and self-worth.
6. Are responsible for their performance and their product(s). They are responsible for the clear, accurate and fair written and/or oral presentation of study imitations, findings and recommendations.
7. Should reflect sound accounting procedures and be prudent in using the resources of the evaluation.

Evaluation Consultant Agreement Form[68]

Agreement to abide by the Code of Conduct for Evaluation in the UN System

Name of Consultant: __Roland Wong_____

Name of Consultancy Organization (where relevant)**:** _____

I confirm that I have received and understood and will abide by the United Nations Code of Conduct for Evaluation.

Signed at *Surrey, BC, Canada* on *28 December 2022*

[68] www.unevaluation.org/unegcodeofconduct