UNITED NATIONS
DEVELOPMENT PROGRAMME

Final Evaluation of the UNDP Project "Enhancing Disaster and Climate Resilience in the Republic of FSM through improved Disaster Preparedness and Infrastructure (EDCR)" (2019-2023)

FINAL REPORT

SEPTEMBER 2023

Report Author:

Raul Guerrero

Project information			
Project title	Enhancing Disaster and Climate Resilience in the Republic of FSM through improved Disaster Preparedness and Infrastructure		
Atlas ID	00118501		
Corporate outcome and output	Outcome 1 of the UN Pacific Strategy 2018-2022: 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. Output 3.2. Preparedness systems in place to effectively address the consequences of and response to natural hazards (geo-physical and climate related) and man-made crisis at all levels of government and community. Multi Country Programme Document (MCPD) (2023-2027): Coopperation Framework Outcome involving UNDP #1: By 2027, people, communities and institutions are more empowered and resilient to face diverse shocks and stresses, especially related to climate variability impacts and ecosystems and biodiversity are better protected, managed and restored. Related Strategic Plan Outcome: Resilience built to respond to systemic uncertainty and risk Output 1.2: Governance systems are risk-informed to manage and finance disasters and shocks		
Country	Federated States of Micronesia		
Region	Pacific		
Date project document signed	18/03/2019		
Project dates	**Start**	**Planned end**	**Actual end**
	18/03/2019	17/03/2020	30/09/2023
Total committed budget	USD 7,400,000		
Project expenditure at the time of evaluation	USD		
Funding source	Government of Japan		
Implementing party	UNDP (Direct Implementation Modality)		

Evaluation information		
Evaluation type	Project	
Final/midterm review/other	Final	
Period under evaluation	**Start**	**End**
	18/03/2019	30/09/2023
Evaluator	Raul Guerrero	
Evaluator email address	raul.guerrero.garcia@gmail.com	
Evaluation dates	**Start**	**End**
	01/08/2023	30/09/2023

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LIST OF ACRONYMS AND ABBREVIATIONS

AWP	Annual Working Plan
CPUC	Chuuk Public Utility Corporation
DCO	Disaster Coordination Office
DECEM	Department of Environment, Climate Change & Emergency Management
DIM	Direct Implementation Modality
DRF	Disaster Recovery Framework
DPS	Division of Public Safety
EDCR	Enhancing Disaster and Climate Resilience
EOC	Emergency Operations Center
EQ	Evaluation Question
FE	Final Evaluation
FSM	Federated States of Micronesia
GESI	Gender Equality and Social Inclusion
GMS	General Management Support
IOM	International Organization for Migrations
NEOC	National Emergency Operation Center
NOAA	United States' National Oceanic and Atmospheric Administration
NWSO	National Weather Service Office
LPAC	Local Project Appraisal Committee
PDNA	Post Disaster Needs Assessment
PRODOC	Project Document
PSEOC	Pohnpei State Emergency Operations Center
PWWA	Pacific Water and Wastewater Association
RMI	Republic of Marshall Islands
SOP	Standard Operational Procedures
SDG	Sustainable Development Goal
SYWA	Southern Yap Water Authority
TC&I	Pohnpei Office of Transportation and Infrastructure
TE	Terminal Evaluation
TOC	Theory of Change
TOR	Terms of Reference
ToT	Training of Trainers
TTPI	Trust Territory of the Pacific Islands
UNDP	United Nations Development Programme
USD	United Stated dollars

EXECUTIVE SUMMARY

Project overview

i. The Enhancing Disaster and Climate Resilience in the Republic of FSM through improved Disaster Preparedness and Infrastructure (EDCR) project was approved in 2019 to enhance the resilience of the people of FSM to the shocks and insecurities resulting from extreme climate-related and geophysical disasters (overall objective).

ii. This objective was to be achieved through three main outputs: (1) Strengthened gender-sensitive Disaster Communication and Climate Monitoring Systems; (2) Enhanced gender-sensitive National and State Disaster Responders readiness capacity; and (3) Enhanced Community Disaster Resilience through improved water resource management, and integrated gender and social inclusion awareness.

Evaluation methodology

iii. Carried out by an external evaluator, the terminal evaluation involved assessing the project's strategy, progress towards the achievement of its main goals and related risks to sustainability. The evaluation assessed and was organized around five key evaluation criteria: relevance, efficiency, effectiveness, impact, and sustainability. They were rated on a six-point scale and each of them included specific factors and processes affecting performance and cross-cutting issues as appropriate.

iv. Data related to project progress and performance was obtained from the review of project documents, official records, and secondary sources. Interviews with key informants were the main tool for collecting primary data. Interviewees were selected in consultation with UNDP and the project team keeping in view their level of participation during implementation and benefits received.

v. The Results Framework indicators and targets were used as the main reference to assess the achievement of the objectives and outcomes. Some quantitative data were analyzed using simple statistical methods to determine progress and trends. Nevertheless, most data were analyzed using qualitative data analysis techniques such as triangulation, validation, interpretation, and abstraction.

Main findings and ratings[1]

Relevance: Satisfactory

vi. The project was fully aligned with UNDP and global mandates and strategies. The objectives and results were embedded into national policies and priorities. Although with some limitations, key stakeholders participated in the project design contributing existing knowledge and ensuring that the objectives and results were consistent with local needs and priorities. The project provided a coherent response that would have benefitted from a more robust internal logic with concrete and solid linkages among the different components as well as further engagement of final beneficiaries.

Effectiveness: Moderately Unsatisfactory

vii. The project strongly focused on activities and outputs and less on outcomes and long-term impact. As a result, the project components and related activities were implemented in silos to a certain extent with a lack of concrete linkages and synergies among them.

viii. Efforts were made to adapt activities and outputs to the context and changing circumstances, however, several key products were not delivered (chatty beetles and Yap wells), some were delivered with important shortages (PSEOC building, fire truck and bucket truck in Kosrae), while others were only delivered at the end of the implementation period without much time to properly implement an exit strategy (radios in Yap).

ix. Despite the limitations in delivering some of the planned activities and products, there was evidence of some benefits at the outcome level. Nevertheless, it was too early to thoroughly assess progress towards systemic impact. Linkages with other relevant initiatives should contribute to scaling up and greater impact.

Efficiency: Moderately Satisfactory

x. The governance of the project responded to the context and allowed participatory decision-making mechanisms to be put in place . Nevertheless, the timeliness of activities and products was negatively affected by both internal and external factors, including a rushed formulation (due to the need to align with the donor procedures) and an unrealistic anticipated duration of project execution that resulted in a reactive approach that prevented proactive and innovative solutions to arising problems. Nevertheless, the project management made significant efforts when feasible to implement corrective measures and collaborate with other stakeholders that resulted in synergies and efficiency gains.

xi. Most of the available budget had been used by the end of the implementation period but it was too early to determine the cost-effectiveness of the project,

[1] Each evaluation criterion was rated on a six-point scale: Highly Satisfactory / Likely, Satisfactory / Likely, Moderately Satisfactory / Likely, Moderately Unsatisfactory / Unlikely, Unsatisfactory / Unlikely, and Highly Unsatisfactory / Unlikely.

which will highly depend on its success for triggering long term sustained changes. The implementation delays and lack of capacity negatively affected the delivery of products and activities.

Sustainability: Moderately Satisfactory

xii. The implementation status did not allow a thorough assessment of sustainability and the project lacked a robust mechanism to measure impact. Despite a comprehensive exit strategy not being envisaged, the project implemented some actions that are likely to contribute to the endurance of benefits at the outcome level.

Recommendations and lessons learned

Recommendations for project sustainability and impact

xiii. Advocate for and assist the FSM Government (e.g. through regular contacts and ongoing activities) to lead the development of concrete plans (including commitment of resources by different entities) to provide continuous technical support and training on the operation and maintenance of equipment and infrastructure. This could involve a rapid response system to fix broken parts (e.g. antennas), purchase spare parts (including back-up batteries if necessary) and instal ancillary equipment (e.g. lightning arresters for the radio systems in Pohnpei).

xiv. Provide further support to develop monitoring systems to follow up on the status of the installed systems and help municipalities maintain them. This should involve establishing strategic partnerships with key stakeholders at the State level as well as national entities and other stakeholders (e.g. IOM) with local presence to provide direct assistance for proper maintenance of equipment and infrastructure.

xv. Recommend the government to seek funding and establish strategic partnerships (e.g. ADB) to:

- Ensure that the project benefits extend to the whole FSM population by installing radios in the remaining sites (including in Yap and outer islands) alongside a new system of chatter beetles; finalizing the NEOC/PSEOC buildings (including equipment); and replicating Weno's water scheme to other communities (in Chuuk and the other States).
- Providing further support to put in place standard operating procedures and strengthen technical capacities and knowledge, including raising community awareness as a whole (e.g., technical assistance, workshops, discussions, surveys, etc.). This should involve implementing concrete actions to increase the engagement of women and youth in the use of, and decision-making about, equipment and infrastructure (e.g. specific training on using and maintaining the radios for providers of health services).

Lessons learned for future projects and programming

xvi. Develop a robust theory of change that clearly identifies the linkages between activities/outputs and outcomes/impact. This should be reflected in a comprehensive Logical Framework, including SMART indicators at all levels.

xvii. Realistically estimate the implementation period, allowing sufficient time to (i) re-engage stakeholders and adapt the project design to any changes that have occurred after conceptualization; (ii) get any developed strategies validated/endorsed by the relevant authorities; (iii) define the technical specifications of highly specialized goods and equipment (including more pro-active involvement of key stakeholders during the procurement process); etc.

xviii. Carrying out thorough project mapping at inception could be an effective way to identify synergies, avoid duplication and increase ownership. It should involve direct engagement with and active participation of key stakeholders such as State Governments (especially when the construction of large infrastructure schemes is involved).

xix. During the inception phase, it would also be desirable to conduct a needs assessment (at household level) and baseline study to generate insightful information on vulnerability and resilience of the target communities. This would help improve the project design and implementation arrangements as well as assessing impact.

xx. Develop fully-fledged gender and youth mainstreaming strategies recognizing that empowerment and increased participation require investments that aim to change socio-cultural norms.

xxi. Implement an improved monitoring and evaluation framework with strong focus on outcomes/impact to support accountability and adaptive management. In connection with the project activities, UNDP could develop a complementary learning agenda to address knowledge gaps in relation to vulnerability and resilience.

xxii. Develop an actionable exit strategy before the project ends. Ideally operationalization plans and concrete commitments should also be put in place (e.g. maintenance).

xxiii. Seek the support of other UNDP offices (e.g. Malaysia) to ensure that procurement notices are widely circulated and advertized reaching out to as many international suppliers as possible and minimizing the risk of bidding failure.

xxiv. From project formulation, or at very beginning of the implementation, engage with other government offices and international partners to secure their support for specific project activities such as shipping equipment (e.g. Pohnpei Office of Transportation and Infrastructure, FSM Department of Transportation, Communications and Infrastructure, National Fisheries Corporation, or International Organization for Migration).

1. PROJECT DESCRIPTION

1.1. Introduction

2. This document presents the main results of the Final Evaluation (FE) of the United Nations Development Programme (UNDP) project: Enhancing Disaster and Climate Resilience in the Republic of FSM through improved Disaster Preparedness and Infrastructure (EDCR). The FE is part of the UNDP Pacific Office in Fiji's evaluation plan and is facilitated by the Commissioning Unit, Monitoring and Evaluation Officer. See the Terms of Reference (TOR) that provided overall guidance to the FE in Annex 1.

3. In addition to this introduction section, the report is structured as follows:

- Section 2 provides a description of the background and context and some summary information about the EDCR project.
- Section 3 sets out the evaluation scope and primary objectives as well as the adopted methodological approaches.
- Section 4 presents the findings based on the analysis of the data and evidence gathered by the evaluation.
- Section 5 summarizes the main evaluation conclusions highlighting the strengths, weaknesses, and outcomes of the project.
- Section 6 provides practical, actionable, and feasible recommendations addressing the sustainability of the project and providing specific advice for future similar projects.

1.2. Description of the intervention

Background and context

4. Spread across part of the Caroline Islands in the wider region of Micronesia in Oceania, the Federated States of Micronesia (FSM) comprises 607 islands (74 of which are inhabited) that span 2,700 km. These islands include small islets that disappear at high tide, coral atolls, and large volcanic islands of more than 80 km^2. FSM has a total population of 102,624 and, while the FSM's total land area is quite small (702 km^2), the country's waters occupy nearly 3 million km^2 of the Pacific Ocean.

5. Formerly a part of the Trust Territory of the Pacific Islands (TTPI), the FSM became a sovereign state in 1986, consisting of four semi-autonomous states: Chuuk, Kosrae, Pohnpei, and Yap. Each state is centered on one or more main volcanic islands, and all but Kosrae include numerous outlying atolls. Each of the respective High Islands of FSM's four States has an international airport and

seaport.[2] Each State has its own executive and legislative bodies and has considerable autonomy to manage its domestic affairs, including its own development strategy. The national government (based in Palikir on Pohnpei island) provides an integrated perspective and vision for the whole of the FSM.

6. FSM is one of the most exposed countries to natural hazards such as droughts, fires, typhoons, storm waves, flooding, and landslides. The effects of climate change threaten to increase the severity and frequency of events that can result in human casualties, water and food shortages, disrupted economic activity, loss of livelihoods, diverted fiscal resources, retracted development gains, etc.[3] The poorest and most vulnerable populations are generally disproportionately affected due to the prevalence of a patriarchal society, limited access to resources, lack of adequate financial means to deal with shocks or the fact that they tend to live in higher risk areas. As a result, cycles of poverty are perpetuated.

7. FSM's low ability to prepare and respond effectively to disasters is exacerbated by its various fundamental inherent characteristics (e.g. remoteness and dispersion, high poverty and unemployment rates, etc.) In addition, the national and state disaster and emergency institutions have very limited resources to carry out their functions effectively, i.e. they lack dedicated emergency operations centers that comply with international standards, emergency communications equipment, community evacuation centers, early warning and monitoring systems, transportation means, storage facilities for emergency stockpiles, and emergency equipment.

Project objectives

8. The EDCR project was approved in March 2019 to enhance the resilience of the people of FSM to the shocks and insecurities resulting from extreme climate-related and geophysical disasters (overall objective). This objective was to be achieved through three outputs:

   (1) Strengthened gender-sensitive Disaster Communication and Climate Monitoring Systems
   (2) Enhanced gender-sensitive National and State Disaster Responders readiness capacity

[2] In Chuuk and Yap States, air and seaports are in geographically different parts of their respective High Islands. In Kosrae and Pohnpei, air and seaports are co-located.

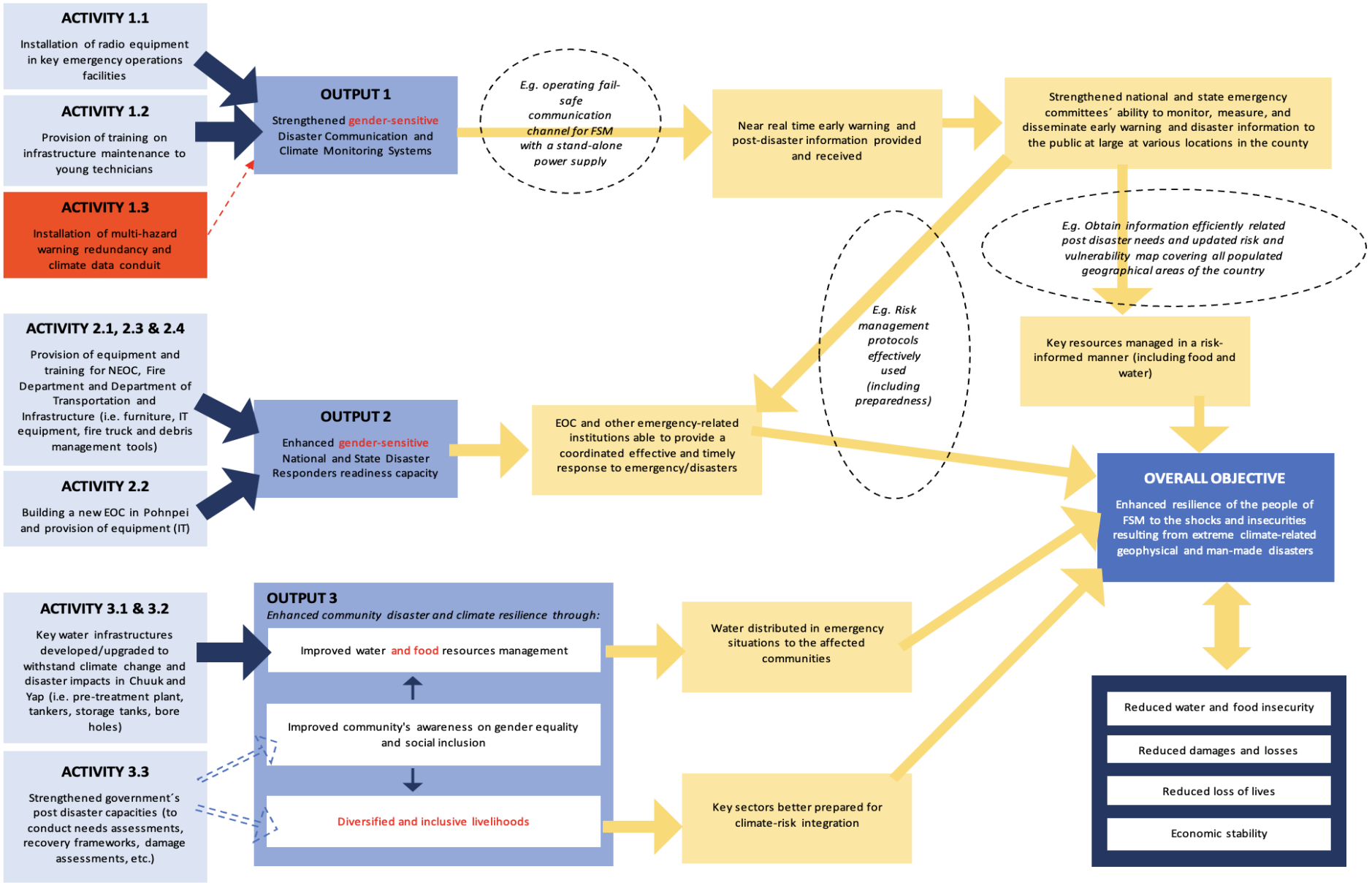
[3] According to the Pacific-Australia Climate Change Science and Adaptation Planning Program (2015) current and future climate-related drivers of risk for FSM in the 21st century include less frequent but more intense typhoons, sea level rise, more very hot days, more extreme rainfall days, changing rainfall patterns and continuation of ocean acidification.
The Pacific Catastrophe Risk Assessment and Financing Initiative (PCRAFI) reported that FSM is expected to incur, on average, USD 8 million per year in losses due to earthquakes and tropical cyclones. In the next 50 years, FSM has a 50% chance of experiencing a loss exceeding USD 105 million and more that 220 casualties, and a 10% chance of experiencing a loss exceeding USD 470 million and 600 casualties. This excludes losses from droughts, and possible downturns in economic growth due to reduced revenue from the tuna industry.

(3) Enhanced Community Disaster Resilience through improved water resource management, and integrated gender and social inclusion awareness

9. The three outputs were elaborated in the PRODOC´s main text and the Results Framework, depicting the Theory of Change (TOC) underpinning the project (including a somewhat confusing graphic representation, see Section 3.1 for further details). Based on the analyzed documents and comments of the Project Manager, the TOC was reconstructed by the FE (depicted in the graph below). It does not aim to reflect the entirety of the project's complexity but to provide an overview of the intervention pathways and causality towards the project´s objective, including some intermediate results (in yellow) and some assumptions for selected causality linkages to prove right (dotted circles).

10. The three outputs were elaborated in the PRODOC´s main text and the Results Framework, including details on how to measure the achievements against nine indicators. Targets are defined for most of them, but credible baselines (all zero) and data sources (only quarterly reports) are not established. In April 2023, the indicators were improved and three were eliminated (justified by the limited budget to implement certain activities). In addition, the Multi Year Work Plan detailed the 10 activities to be delivered to achieve the three outputs.

Figure 1 – Reconstructed Theory of Change



2. FINAL EVALUATION

2.1. Objectives and scope

11. This independent FE involved assessing the project's strategy, progress towards the achievement of the project objective, and outcomes as specified in the PRODOC, as well as related risks to sustainability. The FE summarized lessons learned and made recommendations that can contribute to future programming, policy making and overall organizational learning.

12. As per the TOR, the FE assessed and was organized around four key evaluation criteria: relevance, efficiency, effectiveness, and sustainability (see Table 1). They were rated on a six-point scale and each of them included specific factors and processes affecting performance and cross-cutting issues as appropriate. Further details on the key evaluation criteria are shown in the Evaluation Matrix (see Annex 2).

13. The FE went beyond the assessment of "what" the project performance was and provided a deeper understanding of "why" the performance was as it was, providing the basis for the recommendations. The FE emphasized the importance of sustainability aspects such as the need for continued support for the project results.

14. Cross-cutting issues were considered, including whether gender aspects were featured in the project design, as well as during implementation. This involved considering if gender issues were adequately addressed in the PRODOC and Results Framework as well as whether gender-sensitive data was gathered and reflected in project reporting (e.g. monitoring women's needs among local communities, monitoring women´s involvement in local implementation and management arrangements, assessing if and how the installations/equipment are impacting women). Linked to this, the FE also considered whether the project needs assessment, as well as results and impact monitoring, took account of other vulnerable groups.

Table 1 – Evaluation criteria

Criteria	Main areas/issues addressed
Relevance	The FE assessed the internal coherence of the project, the plausibility of the assumed causal paths towards impact and the relevance of the strategy to address the identified gaps. It also analyzed the alignment of the project design and Results Framework with UNDP's policies and strategies as well as with donor, partner, and global strategic priorities, i.e. contribution of the relevant outcome and output of the Sub-Regional Programme Document (SRPD), UN Pacific Strategy (UNPS/UNDAF), relevant national development plan or environmental policies (overarching Nation-wide Integrated Disaster Risk Management and Climate Change Policy 2013, FSM National Disaster Response Plan 2016, Joint State Action Plans for Disaster Risk Management and Climate Change JSAP 2016-17), etc. The FE assessed to what extent other initiatives that addressed similar needs were considered either at design or during implementation.
Effectiveness	The FE explained the reasons behind the success or shortcomings of the project in delivering its programmed outputs and meeting expected quality standards. It reported evidence of attribution, contribution or credible association between UNDP's intervention and the project outcomes. The assessments included a review of the Logframe indicators against progress made towards the end-of-project targets but also to other proxies to gather any evidence of contribution to the intermediate results as per the reconstructed TOC.
Efficiency	The FE assess the management arrangements and work planning as well as the level of finance (and possible co-financing / leveraged resources). The FE reported on the expenditure rate and financial reporting standards as well as the cost-effectiveness[4] and timeliness[5] of project execution. It analyzed any adaptive management action carried out as well as any cost or time-saving measures put in place to maximize results. It also considered whether the project was implemented in the most efficient way compared to alternative interventions or approaches as well as the quality and usefulness of the project implementation tracking system and project reporting.
Sustainability and Impact	The FE assessed the realized and likelihood of impact.[6] Given the level and time of completion of the planned activities, the evaluation focused on performance at the output and outcome levels, but observations about likelihood of impact were also provided. Assessment of the key conditions or factors likely to undermine or contribute to the endurance of benefits at the outcome level, including factors already embedded in the project design and contextual circumstances or conditions that have evolved during implementation. The FE ascertained to what extent the project put in place an appropriate exit strategy and measures to mitigate risks to sustainability, validating whether the risks identified in the PRODOC were the most important and up to date (financial, socio-economic, institutional and environmental).

[4] Focusing on the translation of inputs into outputs, cost-effectiveness is the extent to which an intervention has achieved, or is expected to achieve, its results at the lowest possible cost.
[5] Timeliness refers to whether planned activities were delivered according to expected timeframes as well as whether events were sequenced efficiently.
[6] Based on the articulation of longer-term effects as defined in the TOC, the evaluation assessed the likelihood of the intended, positive impacts becoming a reality. It considered the extent to which the project played a catalytic role or promoted longer-term scaling up and/or replication as well as the likelihood that the intervention led, or contributed, to unintended negative effects.

2.2. Approach

15. The FE findings and judgements were based on sound evidence and analysis, induction and deduction inferences are almost always present. The information was triangulated as far as possible and analysis leading to evaluative judgements was clearly spelled out. The approach was as inclusive and transparent as possible keeping key stakeholders informed and consulted throughout the process.

16. The FE focused on results using mostly qualitative evaluation methods to determine the project's achievements against the expected results (outputs, outcomes, and impacts). It should be noted that qualitative data is sometimes quantified, and some quantitative data were analyzed using simple statistical methods to determine progress and trends. The Results Framework's indicators and targets were used as the main reference to assess the achievement of the objectives and outcomes. Key financial aspects were assessed by analyzing project budgets and expenditures. As mentioned above, particular attention was given to identifying implementation challenges and risks to achieve the project's expected objectives and sustainability.

17. The FE methodology included:

    - Desk research of project primary documentation such as the PRODOC, monitoring reports, board meeting minutes, financial reports, work plans and other relevant written records (see Annex 3).
    - With the support of a national consultant, thematic interviews were carried out with UNDP, implementing partners and project beneficiaries (see Annex 4).

18. UNDP and the Project Monitoring Unit provided support to the FE in terms of access to project documents and other relevant information as well as assistance in coordinating data collection activities with project staff and stakeholders (interviews).

Sample and sampling frame

19. In view of the scope, timeline, and remote nature of the FE, it was not possible to reach all stakeholders. Therefore, the evaluation adopted a mix of purposive and convenience sampling strategies. The list of key informants was finalized with the help of the project team, considering their level of involvement/participation in project design, implementation and benefits received, also depending on their availability.

Stakeholder participation

20. The FE interviewed over 40 stakeholders including representatives from municipal (such as mayors, chiefs, or district administrators), state and national governments as well as the contractors, UNDP and the donor.

Ethical considerations

21. The work throughout the FE was guided by and aligned with ethical principles and professional standards.[7] This involved truthful and open communication with the project team, UNDP and relevant stakeholders concerning aspects of the evaluation, such as findings, procedures, limitations, or changes that may have occurred. Confidentiality was assured throughout the process.

Data analysis

22. The FE went beyond the assessment of "what" the project performance was and provided a deeper understanding of "why" the performance was as it was. This analysis was the basis for the recommendations. The overall process consisted of three steps: (i) design, (ii) data collection and (iii) analysis and reporting.

23. The findings and judgements were based on sound evidence and analysis mainly using qualitative evaluation methods to determine the project achievements against the expected results (outputs, outcomes, and impacts). The information was triangulated as far as possible and analysis leading to evaluative judgements was clearly spelled out.

24. Most data were analyzed using qualitative data analysis techniques like triangulations, validations, interpretations, and abstractions. Evidence from documents and interviews was validated and triangulated through different sources to identify similarities, contradictions, and patterns. Efforts were made to logically interpret stakeholder's opinions and statements, while analyzing data, keeping in view the specific perspectives of various respondents.

Background information on evaluators

25. The FE was independently carried out by an external evaluator (with extensive experience evaluating disaster risk reduction, climate change and resilience related projects) and a national consultant that supported the interviews. The evaluator reported directly to the Monitoring and Evaluation Officer.

Limitations of the methodology

26. The methodology was envisaged to minimize potential bias ensuring that information was triangulated by leveraging and validating inputs and data from different sources. Nevertheless, several constraints need to be acknowledged and considered at the same time as the FE's findings and conclusions. For example, only a limited number of field visits, face-to-face interviews and workshops were possible. These likely reduced the opportunities for collecting evidence of impact at national level. The lack of solid outcome indicators in the TOC somewhat limited a more robust contribution analysis (see Section 3.1). Participants in the interviews were self-selected, and no specific actions were implemented to unearth the views of marginalized or potentially disadvantaged groups.

[7] For more information, see UNEG 'Ethical Guidelines for Evaluators' available at: https://www.alnap.org/system/files/content/resource/files/summary/UNEG_Ethical_Guidelines_for_Evaluation_2020.pdf

3. FINDINGS

3.1. Relevance

Project alignment

27. The project aimed at effectively addressing the consequences of, and responses to, geophysical and climate-related hazards to protect lives, sustain livelihoods, preserve the environment, and safeguard the economy. It is fully aligned with Outcome 1 of the UN Pacific Strategy 2018–2022, the goals of the Sendai Framework for Disaster Risk Reduction, and the priority areas of the Japan Country Assistance Policy.

28. The project was fully aligned with outcomes of the FSM overarching Nation Wide Integrated Disaster Risk Management and Climate Change Policy (2013). As described above (see Section 1.1), there existed a need for the country to build its capacity to prepare, respond and recover more effectively from future disasters. The existing reactive and short-term disaster response in FSM was unlikely to reduce the economic, human and ecosystem losses associated with a changing climate. The EDCR project was envisaged to promote a more pro-active approach aiming to improve climate monitoring, early warning systems, disaster preparedness, recovery planning, and risk management.

Participation in the project formulation

29. Key stakeholders at national were involved during the project formulation. Nevertheless, the formulation was rushed due to the donor's procedures and deadlines. The interviews confirmed that State level representatives felt that they could have better "developed their own priorities" in the design but they were "required to draw them from existing national priorities." Although it is unclear to what extent they had the capacity to do so, and if it would have affected the overall project design, the project would have benefited from more time during formulation and inception to better reflect local priorities and to gain endorsement from the States. Although there is broad agreement that the project reflected some existing priorities, a few stakeholders believed that commitment and ownership would have increased with more time to identify additional activities (e.g. alternatives to radio connectivity, fencing around wells, etc.)

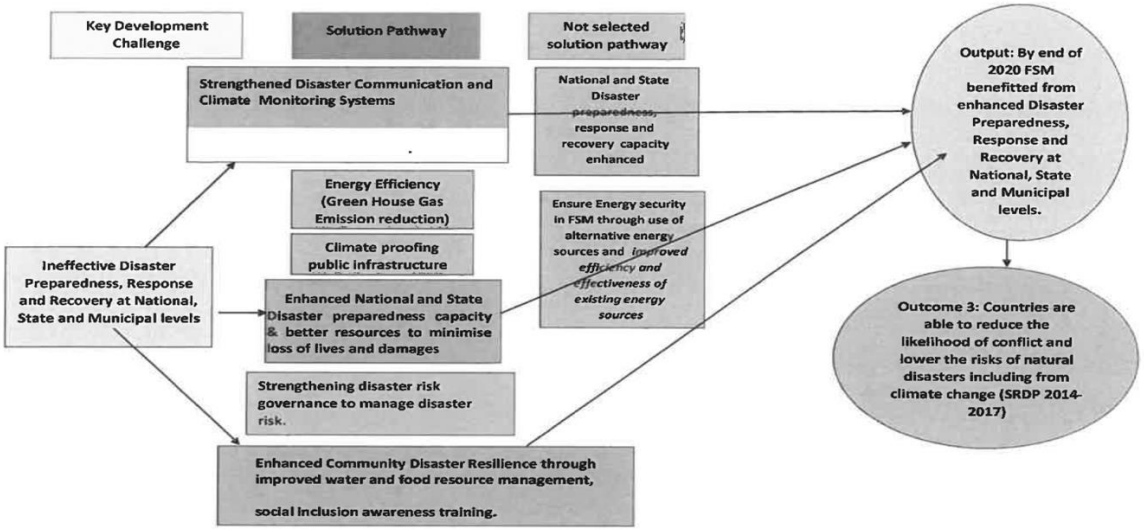
30. The project design was not informed by specific feedback obtained through engaging excluded or marginalized groups or thorough identification of needs at the household level. It is broadly acknowledged that to better manage large scale disasters, responsibilities must be distributed at different levels (i.e. household, community, state, and national). The PRODOC included a too-broad gender analysis at the national level without identifying concrete effects of the project related to specific needs of women and men or acknowledging their different roles (e.g. access to and control over resources).

Internal coherence

31. The PRODOC´s description of the TOC underpinning the project (summarized in the graph below) is rather confusing. The formulation of the outputs is not

specific (for example Output 3 addresses several different issues without clarifying their internal coherence). There also exists some overlap among the outputs and the objective, and the impact pathways are not thoroughly demonstrated, i.e. causality linkages and underlying assumptions are not sufficiently explicit. For example, the PRODOC assumes that the FSM Government will provide both financial and staff time engagement during the project design and implementation without any further details.

Graph 2 – Project's Theory of Change (Source: PRODOC)



32. In any case, all stakeholders agree that radio communication plays a crucial role in facilitating inter-island communication and connecting with the Department of Environment, Climate Change & Emergency Management (DECEM) (confirmed by most interviewees, including for example over 20 mayors of the Northern and Mortlock Islands in Chuuk). All stakeholders recognized the strategic importance of regular and smooth communication prior to, during and post disasters (including with outer islands) to provide a coordinated, effective, and timely response.

33. Although the interviews confirmed that many representatives of municipal governments felt that they were not fully aware of the overall goals and objectives of the project, they recognized its importance "to assist their people prior to, during, and after disasters." Increasing water supply was recognized as a way for States and communities "to be much better prepared to deal with natural disasters such as typhoons and droughts" as well as "to reduce susceptibility to water borne diseases." In fact, the project was launched during a period of drought in Chuuk which contributed to increased support.

34. Most interviews agreed that there was coherence between what the project did and what it was trying to achieve. It should though be noted that some concerns were raised about the adequacy of the selected approach and delivered outputs (i.e. to what extent the activities and strategies fit the objectives). For example, several islands currently use different communication means such as landlines,

mobile phones, and internet (sometimes even using the mayor's personal internet connection).

35. Although some mayors and representatives of municipal governments highlighted during the interviews their preference for internet for quick and efficient communication, it should be noted that, according to the project's communication experts (also confirmed by most stakeholders during the interviews), radio communication would still be essential considering the vulnerabilities of the "new" communication methods such as internet, mobile network or satellite phone, especially during the disaster. For example, many island still lack internet connectivity, the use of internet in the Pacific is hindered by slow speeds, private Wi-Fi providers are charging very high fees in several islands (up to USD 5 for 4 hours of internet access) and there are also maintenance and operating costs associated with the internet infrastructure.

36. Nevertheless, the interviews confirmed the existing interest in expanding the connectivity options which should be recognized in future initiatives. In line with this, there is an initiative at the FSM Congress to establish internet connectivity on outer islands and many interviewees considered that this will be the most sustainable way to communicate.

3.2. Effectiveness

Activity 1.1 Install VHF and HF radio (marine grade where appropriate) in key emergency operation facilities (i.e. MET, line Ministries, Hospitals/Clinics and vulnerable schools), connecting the Northern Meteorological Offices as per PICI Panel Workplan/ Emergency Conversion units between radio frequencies (HF-VHF/UHF cross gate) and enhancing capacities of the Yap State Division for risk communication in climate change

37. The project contributed to strengthen disaster communication by installing high frequency (HF)/very high frequency (VHF) radio equipment at existing Emergency Operations Center (EOC) and outer islands. Technical specifications for HF and VHF radio communication equipment and solar power were developed by UNDP consultants and agreed with DECEM (leading to the finalization of tender documents). Locations for the installation of the equipment in the main and outer islands across FSM was identified and agreed with DECEM.

38. In total, the radios were installed in 68 sites, including four national offices, 12 sites in Pohnpei, six in Kosrae, 27 in Chuuk, and 19 in Yap. ~~In March 2023, it was planned to continue the installation of radios in the remaining sites (12 sites in Chuuk and 19 sites in Yap). There is no evidence that any radios were installed in Yap and~~ Some interviewees complained that not all the islands that were promised handheld radios received them (e.g. Nett Municipality in Pohnpei).

39. In line with the communication experts, the radio equipment supplied was different from previous models (strong under tropical environments, easy to operate, have the option to change frequencies to facilitate communication with different parties, and can operate on solar power).[8] Although they have been in use for only a few of months, several interviewees highlighted their quality and

[8] Two types of radios were delivered: ICOM VHF ic-m330 and ICOM HF ic-F8101.

effectiveness, e.g. "it is possible to reach as far as Palau and the Republic of Marshall Islands (RMI)." The frequency is open to DECEM to listen to. Each municipality and island also have their own frequency, but there's a dedicated emergency frequency. The weather service and outer island offices in Pohnpei are also connected, and the main island municipalities have VHF radios, also funded by the project. It was confirmed during the interviews that the hospital, education system and the Office of Public Affairs in Pohnpei have their own HF means of communications but have access to the same frequency.

40. The project ensured completion of the necessary ancillary works (e.g. concrete bases for antenna) and also installed solar systems for remote islands where there is no power supplies (two small solar panels in one unit and a back-up battery that can last two to three days without direct sunlight). Nevertheless, DECEM has received complaints about the batteries not being charged (related to a defect in power in one case, or settings being changed). Several interviewees also highlighted the absence of backup power sources and challenges related to maintenance (see Section 3.4). This was due to the lack of resources and a change of plans after the solar systems were procured. Originally, four solar panels were purchased for each site but, as suggested by DECEM, it was decided to maximize the number of sites to benefit more islands by supplying only two panels at certain locations.

41. Although the system was in operational condition, the interviews confirmed that there were some communication problems, related to weakened signals or lack of antenna. For example, most islands in Chuuk were able to communicate with DECEM and with each other but the radio at the Disaster Coordination Office (DCO) in Weno was not functioning (probably due to some frequency interference). Therefore, the outer islands were not able to communicate with the DCO, which was a critical component of the project. The project consultant and DECEM had temporarily relocated the antenna to another side to isolate the antenna from the building structure. This evidences the continuous need for technical guidance and support after project completion.

42. There was also a problem with the antenna in Sapwuahfik (Pohnpei) and the EOC was not able to reach them (it should be noted that the project only supplied the solar system and the existing radio/antenna was connected by DECEM. Once the Sapwuahfik antenna is fixed, it (the system) will cover the entirety of Pohnpei. The antenna in Pissemwer was not delivered by the contractor. It was mentioned during the interviews that the contractor was planning to install the new antenna.

43. The communication network typically involves three individuals from each island, comprising a mix of employees and volunteers from the disaster committees. Key personnel such as principals and health committee chairpersons are actively involved. Although some interviewees confirmed that some islands were interested in training women (e.g. providers of health services who are believed to be the most active during disasters), no women were involved in operating the radio systems at the time of the TE.

44. Other issues that jeopardized communication were identified during the interviews, including radios locked in municipal buildings and only accessible

when the offices were open, radios not operated 24 hours a day (only twice a day). It was noted during the interviews that other communication channels are also used in the outer islands such as digital platforms (email, social networks, and messenger services).

Activity 1.2 Provide training course for young technicians on how to maintain the current communications infrastructure and EOC management

45. The project provided two sets of virtual training on solar systems for HF/VHF radio operation (August and November 2021) attended by 35 representatives of DECEM, Pohnpei Office of Transportation and Infrastructure (TC&I) and governments of Yap, Chuuk, Kosrae and Pohnpei (27 men and 8 women).

46. A series of trainings were provided after the major radio equipment arrived in Pohnpei, including a brief session to DECEM for concrete base work for radio masts (28 January 2022), training of trainers for HF/VHF radio basic operations and maintenance (6–8 April 2022 attended by 11 men and one women from DECEM, TC&I and Pohnpei State Department of Education), follow up training on radio programming to DECEM staff (22 April 2022), and follow up guidance on mast installation and settings for the back-up batteries to DECEM staff (7 June).

47. Furthermore, a communication expert provided quality assurance and hands-on trainings. This included (i) a refresher on solar installation to DECEM staff (29/09/2022 and 3/10/2022) and (ii) radio operation training delivered face-to-face to Pohnpei State officers and online to Chuuk State officers (7/10/2022). The same expert also provided onsite training of radio installation and maintenance in Kosrae (9/2/2023).

48. During the installation work at remote islands in Pohnpei, Chuuk and Yap, hands-on training was provided in collaboration with DECEM to radio operators at each site. Due to the time constraint of the government vessel timetable, the project was only able to have 4 hours in each island. It was highlighted during the interviews that this was not enough time for equipment installation and meaningful training of the operators (a full day would have been more appropriate). Although some interviewees confirmed that some islands were interested in training women (e.g. providers of health services who are believed to be the most active during disasters), the project did not implement any specific action to include women in the training.

Activity 1.3 Install multi-hazard warning redundancy and climate data conduit through Chatty Beetles in 2 locations with 2 spares

49. The activity was cancelled at the 5th Project Board meeting in November 2020 due to the lack of progress. The University of Hawai'i was fully engaged in the COVID 19 response.[9] It was highlighted during the interviews that a new system of chatter beetles would be very useful. "The outer islands are the main concerns

[9] The FSM National Weather Service Office (NWSO) is part of the United States' National Oceanic and Atmospheric Administration (NOAA) which works closely with the University of Hawai'i to install chatty beetles in the region. The university is the only entity doing this and its active participation was essential. It should be noted that a similar activity was included in the EDCR project in RMI but at this point chatty beetles have not been supplied.

because of their remoteness and if a disaster like a tsunami or typhoon is identified in the middle of the night, it may be impossible to wake people up with the HF radios. With a chatter beetle, the only way to turn the alarm off (which is a louder noise than an engine siren) is to open it up and respond to the message. That would be very effective on the outer islands."

Activity 2.1 Improve the technical and operational capacity of the NEOC, including furniture, equipment, and training personnel from all states, to meet functional standards

50. The project contributed to strengthen the technical and operational capacity of the National Emergency Operation Center (NEOC) by completing the extension of the main building in Pohnpei (May 2022).[10] The extension allows the NEOC to be used for its sole purpose, rather than being used as overflow office space for DECEM as was the case prior to the extension. An official handover ceremony was held in November 2022. It should be noted though that, due to the budget constraints, some components were not built. Priority was given to the basic structure of the building to keep the cost within the available budget. The government sought the additional funds needed for completion.

51. The project also provided ICT equipment for the NEOC. The contract was issued in September 2021 and the items were handed over to DECEM in February 2022. Although it was not in the project's scope and it is not directly attributable to it, the implementation of the activities contributed to raising awareness about the need to establish Standard Operational Procedures (SOP). It was confirmed during the interviews that it has recently been required to develop such SOP for EOC management accompanied by appropriate training.

Activity 2.2 Construct one new Pohnpei State EOC and equip with emergency communication systems to meet functional standards

52. In 2019, an old building at the proposed site of the Pohnpei State Emergency Operations Center (PSEOC) was demolished by the Pohnpei Transportation Authority (PTA). Draft tender documents for the detailed design and construction of the PSEOC were prepared in 2019. The tender was launched in August 2021 but cancelled due to limited market interest (only one bid) and increased price (it exceeded the available budget). The tender was re-launched in December 2021 after the scope of work and evaluation criteria had been revised (priority was given to the basic structure to keep costs within the available budget). The contract was signed in May 2022.

53. The scope of work under the contract was finalized in May 2023 and a handover ceremony was planned to take place in September. The intention was that the building operates as the PSEOC supporting both slow and rapid-onset emergencies and disasters. Nevertheless, the building remained unfinished at the time of the TE and the government was seeking additional funds to complete it. The second floor, supposed to host the PSEOC, was empty.

[10] A&E design for the NEOC building extension was finalized in March 2021. The works contract was issued in October 2021 and the substantial completion certificate was issued the 31st of May 2022.

54. The project funding just provided the building structure, and office space on the ground level. The ground floor has four bay areas, and one has been converted as a temporary PSEOC and communication room. The project also provided IT equipment (contract issued in September 2021, items received in November 2021 and official handover ceremony in March 2022). It was confirmed during the interviews that the new building has communication systems, large screen TVs and a computer. However, the project did not provide any furniture.

Activity 2.3 Reinstate Fire department capabilities to be able to respond effectively and timely to emergency/disasters (i.e. procurement of one equipped fire truck with associated and accredited training)

55. One of the first activities of the project was to deliver rescue equipment to the Division of Public Safety (DPS) of Kosrae (November 2019). The interviews confirmed that the police were better equipped to respond to emergencies and rescue people inside cars hit by falling trees. There has been little requirement to use the equipment to date, with it only being used once in the instance of a small landslide.

56. The project also supported the Kosrae State Government to strengthen the fire department by supplying a fire truck to the Department of Public Safety (April 2021). Two sets of virtual training were provided by the supplier to 11 staff members (all men). Although the technical specifications were confirmed by the counterparts before the procurement process was launched, the interviewees confirmed that the use of the fire truck received is rather limited as it does not have an integrated water tank. .

Activity 2.4 Procurement of equipment (chainsaws, woodchippers, shredders and a cherry picker/ hydraulic long reach platform) for debris management

57. The project supported Kosrae State Government to improve debris management by supplying a bucket truck for tree clearing, a woodchipper and three chainsaws to the Kosrae Department of Transportation (between November 2019 and November 2021). The interviews confirmed that the equipment was utilized to "maintain the road network keeping the roadside clear and cutting overhanging trees that may disrupt access or damage powerlines during strong winds or storms." As put by an interviewee, the project "has brought us further in our readiness" to respond to emergencies. It was confirmed though during the interviews that "the bucket truck is being used very conservatively" as it utilizes Diesel Emission Fluid that does not available on the island (see Section 3.4).

58. Virtual training on the use and maintenance of the woodchipper was conducted in September 2020. Nevertheless, some interviewees highlighted that more training would be needed for the Department staff to troubleshoot the equipment. There are very few mechanics on the island familiar with the new technologies in the equipment (e.g. anti-lock brake system).

Activity 3.1 Improving emergency water management in the State of Chuuk (pre-treatment water tank and two water tankers)

59. The project contributed to improving the water supply infrastructure in Weno (Chuuk) by rehabilitating 14 deep wells (completed in August 2020). In August

2021, a water treatment plant was rehabilitated by the Chuuk Public Utility Corporation (CPUC) and the raw water intakes were also improved.

60. It was confirmed during the interviews that the 14 wells supply 95% of the water in Weno (650,000 gallons per day).[11] According to the project reports, a marked increase in the flow from the intakes was observed with an estimated increase in water production of 25%. CPUC provides water to 480–520 customers and leases land from approximately 140 landowners (99% of them secured, including where the 14 water wells are located). It was estimated that almost 4,000 people benefited directly from the refurbished infrastructure.

61. Interviewees confirmed that the project addressed Chuuk's disaster preparedness priorities by more than doubling Weno's water supplies and enabling Chuuk to be much better prepared to deal with natural disasters such as typhoons, droughts, etc. The provision of clean water to the local communities has also reduced susceptibility to water borne diseases. The water project is now serving as model not only for Chuuk, but for the rest of the region (see Section 3.4).

62. In addition, a portable water tanker was handed over to CPUC in May 2021. Virtual training was provided by the supplier in June 2021 to eight CPUC staff (all men). Prior to the project, CPUC supplied water only to those customers hooked up to the water line (along the paved roads, a total distance of around 1.8 miles). The use of the water tanker has resulted in a 20–30% increase in water delivery capacity, allowing consistent supply of 100,000 gallons per month to other areas and villages in Weno (approximately 100 trips monthly to fill family water tanks that are not hooked up to the water lines).

63. Some interviewees believed that those who benefited the most from the improved water availability are women and children (often charged with collecting water for the household). It was also believed that the improved access to water has reduced some risks for women by bringing it closer to their houses (e.g. apparently some attacks were reported in the past when women collected water after dark far away from the house or used outdoor streams and springs to wash).

64. In addition, CPUC maintains an active gender action plan (35% of its workforce and two out of five board members are women). The organization has twice in a row received recognition for having the highest gender balance in the Pacific Water and Wastewater Association (PWWA).

Activity 3.2 Enhance disaster response capacities in the State of Yap particularly focused on augmenting the capacity for water management in selected low-lying islands.

65. The Southern Yap Water Authority (SYWA), a quasi-governmental organisation, services 1,500+ customers in the south of Yap, including the weather station by the airport (supplying an average of 15 million gallons of water per year).[12] The SYWA also used to service the airport but no longer has the capacity to do so as

[11] Efforts were ongoing to improve the remaining 5% service water supply, which comes from streams.
[12] The Southern Yap Water Authority services the South Dalipebinaw Municipality, South Rull Municipality, Kanifay Municipality and Gilman Municipality.

it relies on just two old wells. The project was designed to improve the water system by drilling and connecting five new wells to the network (increasing water supply to up to 40 million gallons per year).

66. Unfortunately, it was not possible to complete this activity despite all the preparatory work being completed in 2021 with (i) a drilling rig and other related equipment and construction materials delivered to the SYWA (July), (ii) a Water Resource Management Specialist recruited to provide technical support (September), and (iii) a drilling rig operator engaged (December).

67. The drilling work was on hold from February to June 2022 as the rig required a replacement electrical component. The drilling work of the first well was completed in July. However, before the well could be connected to the network, the work had to stop again due to the illness of the drilling rig operator (this well does not yet have a pump installed). At the time of the TE, the work has not been resumed as there is no drilling rig operator available in the island. The SYWA was seeking funding from the state or national governments.

68. Instead, the project repaired a storage tank and enabled the installation of a pump and a pontoon to secure additional water at the quarry pond located by the airport (to pump water into the filtration system and then pump it into the distribution tank). Clarifiers and filters for the service water were also provided and were operational. The unused funds were used to purchase water meters as well as casing and other material for the wells. These supplies arrived at the water authority the same day as the TE interview took place and still need to be installed.

69. According to the progress reports, some operations and maintenance training was provided under the project, including training related to the drilling rig, deep wells, and the water treatment plant (March 2023). It was though confirmed during the interviews that the water supplied by the SYWA is not treated (apparently SYWA would like to implement a communication campaign with the Environmental Protection Agency before commissioning the water treatment plant). In addition, no specific efforts could be identified to mainstream gender under this activity. Only one out of four staff of the SYWA is a woman and there are no women among the six members of the Board.[13]

Activity 3.3 Conduct Post Disaster Needs Assessment (PDNA) and Disaster Recovery Framework (DRF) including Introduction to Disaster Management (IDM), Initial Damage Assessments (IDA) and EOC Management Training of Trainers (ToT) to government identified staff

70. The Gender Equality and Social Inclusion (GESI) Workshop was conducted in October 2020, attended by 61 participants (57% women) to discuss the importance of mainstreaming protection, gender, and social inclusion issues into the development programme.

[13] The level of SYWA capacity is very different from CPUC that had received a large fund from the Asian Development Bank.

71. The Post Disaster Needs Assessment (PDNA) training was originally scheduled in February 2020, but it was cancelled due to the COVID-19 outbreak. A virtual PDNA training was finally organized in July 2021, attended by 50 participants from the national government and state partners from Pohnpei, Chuuk and Kosrae (32% women).

72. The EOC management training was cancelled at the 9th Project Board meeting (November 2021).

3.3. Efficiency

Project governance

73. Most stakeholders thought that the Project Board provided appropriate strategic guidance and oversight of operational aspects, including approval of annual budgets and work plans. It met 12 times between September 2019 and December 2022. The PRODOC envisaged that it would be composed by representatives from the FSM Government (DECEM), UNDP (FSM and Fiji Offices) and the Embassy of Japan.

74. To facilitate implementation, it was decided to also include the State government agencies (e.g. SYWA, CPUC, Chuuk EMC, Kosrae Disaster Management Office, Kosrae State Department of Transportation & Infrastructure, Pohnpei Fire Department, Pohnpei Department of Public Safety, etc.) Despite the challenging context, the mechanisms put in place by the project promoted the participation of stakeholders at different levels, allowed the identification of synergies and contributed to strengthen ownership.

Implementation modality and management arrangements

75. Under a Direct Implementation Modality (DIM), the project was implemented by the UNDP Pacific Office as part of the Resilient and Sustainable Development team that was responsible for the overall and day-to-day management, including monitoring and evaluation of achievements and use of resources through:

    - The Regional Support Team (based in Fiji). This team comprised a full-time international Project Manager and a Finance Officer as well as a Deputy Project Manager (08/2019-01/2020), a Communication Officer (09/2019-09/2020), a Procurement Specialist (07/2019-08/2020 and 02/2021-02/2022) and a Project Associate (08/2019-05/2021).
    - The FSM in-country team. This team was responsible for on-the-ground project activity monitoring, coordination, guidance, and reporting to both the line ministries and the Regional Support Team. It included three staff hired under UNDP contract: a Country Project Coordinator, a Procurement Officer and a Finance/Administrative Associate. Nevertheless, the Country Project Coordinator only worked from September 2019 until September 2021 due to budget constraints. Since then, the role was undertaken by the Regional Project Manager.

76. Despite the challenging context, the interviewees considered that efficient implementation arrangements were put in place and support was efficiently

delivered though both the regional and in-country teams. Nevertheless, the unrealistic timeframe continuously jeopardized the implementation, including the one-year extensions. The project had to deliver the activities according to unworkable workplans and movable deadlines. This resulted in a reactive approach (narrowing the opportunities to anticipate innovative solutions to arising problems).

77. Although the mechanisms put in place were not sufficient to provide a timely response to all the impending problems (see Section 3.2), efforts were made to find alternatives, expedite implementation and exploit synergies. For example, the project allowed joint procurement processes (fire trucks or radio equipment for both Palau and FSM). This, together with using the same consultant for radio programming, not only saved time and resources but also ensured compatibility and complementarity between the communication systems. Although the scheme could not be finalized as planned, the project helped the SYWA to identify the most urgent needs (this component was still undefined after the first Project Board meeting). After cancellation of the PDNA training in FSM due to the COVID-19 pandemic, the project facilitated FSM participants to be included at a later stage in the online training provided by another UNDP project, Disaster Resilience for Pacific SIDS (RESPAC), .

Regional dimension

78. The Regional Support Team supported similar projects in three countries (i.e. RMI, Palau, and FSM), including technical assistance, training, and capacity development through regional activities, coordination, and direct support to the target countries. The PRODOC is unclear about the regional dimension of the project, sometimes referring to activities implemented in three countries.

79. The PRODOC also planned to establish a Technical Advisory Group (UN Joint Presence Office, UNDP/RESPAC, JICA, SPC, SPREP, PMC, IOM, UNWOMEN, WMO, UNISDR and OCHA) to provide strategic technical oversight to the Project Manager for effective implementation, including building synergies with ongoing activities in the region and ensuring alignment with regional objectives. Ultimately, however, this Group was not established.

80. Although the regional dimension of the project was unclear at design and never fully unpacked during implementation, some efforts were made to ensure linkages with other disaster risk management projects (see above under implementation modality and management arrangements). The initial plan was that the Project Manager reported to the RESPAC Project Manager. After the LPAC suggestion, the Project Manager reported directly to the Resilience and Sustainable Development Team Leader. Until now, evidence of cross-fertilization between projects remains anecdotal and the generation of regional knowledge limited (not systematized).

Timeliness of implementation

81. Most of the interviewees thought that the anticipated duration was unrealistic for a project that involved recruiting the implementing team, construction of infrastructure schemes, several procurement processes, etc. For example, the

actual implementation of activities only started six months after the project was launched (with 50% of the implementation time already consumed). In particular, the project design did not sufficiently account for the likely risks linked with construction works.

82. The project proposal was prepared between January and March 2019, including a field mission of UNDP regional staff.[14] In March, the Japanese Ministry of Foreign Affairs approved the proposal. During April 5–6, a remote Local Project Appraisal Committee (LPAC) meeting was undertaken to get final comments and inputs from the FSM Government and UNDP units. The PRODOC was signed by the Government on April 24th. The project was initially planned to be implemented over a 12-month period (from March 2019 until March 2020).

83. During the first three months, the project mainly focused on the recruitment of staff and preparatory works for major procurement. The project staff came on board during the third quarter of 2019 followed by the inception workshop and the first Project Board meeting held in September 2019. Therefore, limited results were achieved in 2019.

84. At the end of the 12-month implementation period (March 2020), the project duration was extended until the end of March 2021 (duplicating the original implementation time). The Results Framework was revised due to budget limitations (output indicators). A new risk related to the COVID-19 pandemic was added recognizing that state-level stakeholders were heavily involved in the COVID-19 Task Force, which could delay consultation and decision-making processes. The project received another two no-cost extensions: until the end of March 2023 (tripling the original timeline) and until the end of September 2023.

85. The implementation was guided by seven annual workplans that were updated approximately every six months. Progress was tracked through four Annual and 10 Quarterly Reports. All these reports highlighted that the project accumulated significant delays (e.g. only four out of nine activities were reported as completed at the end of 2022, and three activities were still being implemented at the end of March 2023). As mentioned above, there were activities being implemented at the time of the FE and the project did not deliver some of the planned outputs.

86. Acknowledging the unrealistic implementation timeframe (including the one-year extensions), delays were also explained by major disruptions due to the COVID-19 pandemic (e.g. travel restrictions,[15] impossibility to organize in-person trainings, shortage of workers,[16] etc.) The pandemic also worsened existing

[14] The Project Team of the UNDP project Disaster Resilience for Pacific Small Island Developing States (RESPAC) visited the FSM during February-March 2019.

[15] The project relied on the government ship to dispatch missions of HF/VHF radio installation as there were no regular scheduled ships available in most of the remote islands. Government ships are often under maintenance and, after the COVID-19 community outbreak, were prioritized for the vaccination campaign to outer islands (it was prohibited to be on board for any other reasons). The project could not complete the installation of radios in most of the outer islands in Chuuk on time, and not at all in Yap.

[16] The construction of PSEOC was delayed due to the COVID-19 community outbreak which first occurred in Pohnpei State in August 2022. As a result, there was a continuous restriction of deploying labor force from the Philippines, which is the main source of construction manpower in the FSM.

bottlenecks in-country such as the very challenging logistics (e.g. the installation of radios was delayed due to the unavailability of a government ship as well as a lack of manpower in some islands to carry heavy equipment). Tendering and construction difficulties also explain part of the delays (e.g. shortage of materials, higher-than-expected prices,[17] the need to revisit the scopes of work,[18] low interest from companies,[19] and unexpected works).[20]

Available capacities

87. Overall, the procurement processes proved to be lengthier that expected. As a result, implementation excessively focused on delivering outputs (i.e. procurement of equipment and construction works) rather than contributing to long-term impact through achieving intermediate results. The interviewees confirmed that the efficiency was also jeopardized by the lack of capacity at a local level. For example, Kosrae requested a small fire truck, to enable easy access around the island (some parts of the island would not be accessible to a larger fire truck). Due to a lack of expertise, the technical specifications were approved by the Kosrae stakeholders without realizing that the truck did not have an integrated water tank.[21]

88. Several interviewees also highlighted that the procurement of some of the equipment could have been more efficient. For example, it was mentioned that the radio systems could be better served with movable antennas in case there is a need to move them to a safer place. Similarly, the tanker that was purchased for CPUC was considered "too fancy and expensive". It was believed that a couple of more simple/basic tankers could have been bought for the same amount of money. Savings like this could have allowed the implemention additional activities (e.g. putting up fences and better security around wells). All this needs to be verified by technical experts, which could not be done through this expedited evaluation process.

Use of resources

89. The total budget of the project (USD 7,400,000) was financed through a Government of Japan grant. 85% of the budget was dedicated to implementing activities directly related to the three outputs and 15% to management activities, including 8% for General Management Support (GMS).

Table 2 – Project´s budget (in USD)

	Planned (PRODOC)	
Output 1	1,224,141	17%

[17] The prices of construction materials were higher than expected due to Russia's invasion of Ukraine. The construction company also reported delays in the shipment of the materials due to the war.
[18] The construction of the PSEOC needed to be re-tendered.
[19] Partly due to the limited time and stringent requirements related to liquidation damages and performance security.
[20] Unexpected sewage pipes were found after the excavation started for the construction of the PSEOC. Pohnpei State had to communicate with various stakeholders to remove the pipes, which took approximately one month.
[21] Only when the truck arrived did the stakeholders realize that it was the type that requires to attach to a fire hydrant or other water source, rather than having an integrated holding tank for water.

Output 2	2,805,001	38%
Output 3	2,275,001	31%
Management (inc. 8% for GMS)	1,095,857	15%
TOTAL	7,400,000	100%

90. The expenses during 2019 were only 11% of the total budget, with three quarters dedicated to management activities. Conversely,expenses were well balanced during 2020–2022 with 22–38% of the total used every year. The expenses reported in February 2023 (tentative figure retrieved from the Combined Delivery Report) amounted to USD 5,649,362 (including a small UNDP contribution), which represents approximately 75% of the Government of Japan grant. Expenses under the activities directly contributing to the outputs represented 70% of the cost estimated in the PRODOC and the management costs were 111% of those planned. Due to the cost increases mentioned above (partly due to the COVID-19 pandemic), an important part of the resources under Output 1 were reallocated to the other budget lines.

Table 3 – Project´s expenditure (in USD)

	Planned (PRODOC)	Expenditure at February 2023
Output 1	1,224,141	380,741
Output 2	2,805,001	2,311,146
Output 3	2,275,001	1,731,444
UNDP contribution	-	7,115
Management (inc. 8% for General Management Support)	1,095,857	1,198,916
UNDP contribution	-	20,000
TOTAL	7,400,000	5,649,362

91. As mentioned above, the original targets of the project were revised after the first year of implementation as they were not considered to be achievable. As described above, some activities were cancelled or remain unfinished at the time of the FE. Even if the scope of the planned works was reduced, additional funds were needed.[22] There was also some internal re-allocation of resources (e.g. from Kosrae to Pohnpei). Some interviewees believed that having more time at the project start to identify additional activities within the States would have allowed them to fully utilize their allocations.

Cots-effectiveness

92. All interviewees agreed that it was too early to determine the cost-effectiveness of the project, as this highly depends on the success in triggering long term sustained changes. As stated by one of, "the efficiency of the project is yet to be seen and will be proved should an emergency situation occur."

[22] For example, the budget for the new PSEOC building fell short, so UNDP asked Pohnpei State Government for additional funding. The state was, however, able to receive funding under the country's Compact of Free Association with the United State. (Note to Raul: we had concluded ceremony in 21 September only for the core part of the facility)

93. The project did not gather sufficient data to make any thorough estimations on the unit costs of the outputs or the cost-effectiveness of the activities. In addition, good comparative data are not available (e.g. remoteness of the targeted populations). Nevertheless, efficiency was negatively affected by implementation delays and limitations in the delivery of products and activities. As analyzed above, important activities were not completed and there were shortcomings on some of the delivered outputs (e.g. chatty beetles, PSEOC building, fire truck, bucket truck and Yap wells).

94. Furthermore, some interviewees believed that a more flexible design would have allowed for a better response to other local priorities (e.g. internet connectivity, fencing around wells, etc.) and would have also allowed full utilization of the project allocations in each state (e.g. Kosrae). It was, for example, mentioned that savings from certain equipment acquisitions could have been allocated to address other critical needs such as fencing around the 14 wells in Chuuk. It should be noted that the evaluation could not triangulate this with technical experts.

95. The efficiency of the project will be much higher if the remaining works are completed and the identified linkages with other initiatives contribute to trigger long term sustained changes on livelihoods and at the community level (see Section 3.4).

3.4. Sustainability and Impact

96. The project contributed to strengthening disaster communication and climate monitoring systems but with limitations (Output 1). The project aimed at upgrading disaster communication equipment in 85 locations at both the national level and across the four States. This was achieved in 68 sites (Indicator 1.1). According to the project reporting, 63,498 people benefit from the upgraded disaster communication (49% women).[23] The original plan was to reach 102,624 persons (49% women) (Indicator 1.2).

97. The interviews confirmed that lightning arresters have already been put in place for the radio systems in Yap and Chuuk (so lighting does not burn the radios) and DECEM intends to do the same in Pohnpei. The interviews confirmed that beneficiaries are satisfied with the radios. Nevertheless, they have only been used in relation to contact search and rescue vessels (missions on outer islands), but yet not for natural disasters. Little efforts were made in terms of enhancing the gender sensitiveness of the systems.

98. The installation of radios indirectly benefitted approximately 18,385 people who can receive early warning information (49% women). The communication equipment is expected to last 10 years or more but it is important to note that there is limited funding available for maintenance (radios and solar panels). Currently, there is only one battery per radio unit with no backup. Apparently, the International Office for Migration (IOM), which has staff on outer islands, has agreed to provide support to check the equipment. In addition, there is a plan to

[23] Census 2010 (umber of population by sex was estimated).

dispatch a communications technician to Chuuk (JICA volunteer). Some interviewees hoped that funding may also become available for maintenance under the new Compact of Free Association with the United States.

99. The need for training, particularly for female operators, is identified. Additionally, the islands expressed interest in expanding their connectivity options, such as using Zoom, to enhance communication and learning opportunities. Although it needs to be technically validated and would not replace the project's efforts and equipment (but rather complement them), these findings underscore the importance of continued support and investment in the radio communication infrastructure for the benefit of these island communities.

100. The National and State Disaster Responders readiness capacity has been strengthened with limitations (Output 2). It was reported that a total of 24 staff members of DECEM (21% women) improved their capacities in information management and coordination (the target was 30 persons by the end of the project). This includes the National Disaster Committee, National Disaster Coordination Team and DECEM staff. As mentioned above, NEOC was also requested to establish an SOP for the EOC management and to provide further training (the project has already suggested to partner with RedR that could provide the capacity development in these area). Although limited, there were some efforts to enhanced gender-sensitive responsiveness. Enquiries were ongoing with DECEM to create a position responsible for hazard mitigation.[24]

101. It was confirmed during the interviews that the service has an increased budget to maintain the building. Maintenance of the PSEOC will be the responsibility of firefighters, including seeking for experts to rectify any problems that may come up. The service started out with 35 firefighters, but currently has only 22. Four more were expected to be added to the team in the following months.

102. As mentioned above, the PSEOC building remains unfinished at the time of the FE. The service was looking for funding for furniture and to complete the second floor (it is estimated that an additional USD 500,000 are needed). According to some interviewees, more equipment and vehicles was also needed, including two new fire trucks to support not only firefighting but delivering water and undertaking decontamination activities.

103. The interviews also confirmed that the equipment received by the Fire Department was subject to regular maintenance (monthly) to ensure everything is ready for immediate use. Training has been undertaken with the Department of Health Services around emergency responses, and to ensure there is a team ready for assistance as required. Further training was provided in relation to the extraction of victims from vehicle accidents. The fire track received by Kosrae that is without an integrated water tank is of very limited use on the island. Interviewees stated that they were looking at opportunities to get an additional fire truck that actually carries water.

[24] The national government, International Office of Migration and Emergency Service are working together on the plan. There used to be a hazard mitigation officer, but the role was de-funded a couple of years ago.

104. Interviewees believed that the smaller equipment received under the project can easily be maintained, while the more high-tech equipment poses challenges. It was mentioned that there were very few mechanics on the island familiar with the anti-lock brake system and the new technologies in the equipment. Similarly, the new bucket truck delivered to Kosrae utilizes Diesel Emission Fluid that is not available on the island.

105. The project contributed to enhanced community disaster resilience through improved water resource management with limitations (Output 3). As mentioned above, almost 4,000 residents of Weno (513 water connections) benefited directly from the refurbished infrastructure (the 14 wells supply 95% of the consumed water). In addition, CPUC leases land from approximately 140 landowners.

106. It was confirmed during the interviews that the CPUC intends to maintain the equipment through the fees raised by electricity customers – these will subsidize water provision and sewage. The CPUC has also successfully secured USD 35 million in funding from the Asian Development Bank (ADB) for the expansion of water lines beyond the existing water pipeline. The EDCR project was being used as a model both for Chuuk and the rest of the region.[25] Nevertheless, a monitoring system would be needed to follow up on the status of the systems and help municipalities to maintain them.

107. As mentioned above, the works in Yap were only started, rather than completed. Despite some equipment and training being provided, it is unlikely that there are any direct impacts for the population. It was confirmed during the interviews that the SYWA was searching for a technician to maintain the drilling equipment and the air compressor, as well as for funding for ongoing maintenance and the drilling of the remaining wells. SYWA will also conduct a communication campaign for introduction of chlorination of their water supply.

108. Some efforts were made in terms of integrating gender and social inclusion awareness through the GESI workshop and PDNA training. In total, the project contributed to strengthen the capacities of 111 participants (46% women).

[25] The new land lease model utilized under the project, which allows for landowners of the areas that the wells are on to be shareholders, is groundbreaking and allows for more benefits to landowners/community members. The model is being expanded across Chuuk under a new grant from the ADB.

4. CONCLUSIONS

109. This section presents the FE ratings, including a brief justification. Each evaluation criterion was rated on a six-point scale: Highly Satisfactory / Likely, Satisfactory / Likely, Moderately Satisfactory / Likely, Moderately Unsatisfactory / Unlikely, Unsatisfactory / Unlikely and Highly Unsatisfactory / Unlikely.

Relevance: Satisfactory

110. The project was fully aligned with UNDP and global mandates and strategies. The objectives and results were embedded into national policies and priorities. Although with some limitations, key stakeholders participated in the project design contributing existing knowledge and ensuring that the objectives and results were consistent with local needs and priorities. The project provided a coherent response that would have benefitted from a more robust internal logic with concrete and solid linkages among the different components as well as further engagement of final beneficiaries.

Effectiveness: Moderately Unsatisfactory

111. The project focused more on activities and outputs and less on outcomes and long-term impact. As a result, the project components and related activities were implemented in silos to a certain extent with a lack of concrete linkages and synergies among them.

112. Efforts were made to adapt activities and outputs to the context and changing circumstances, but several key products were not delivered (e.g. chatty beetles and wells in Yap), were delivered with important shortages (e.g. PSEOC building, fire truck and bucket truck in Kosrae), or were only delivered at the end of the implementation period without much time to properly implement an exit strategy (radios in Yap).

113. Despite the project limitations in delivering some of the planned activities and products, there was evidence of some benefits at the outcome level. Nevertheless, it was too early to thoroughly assess the progress towards systemic impact. Linkages with other relevant initiatives should contribute to scaling up and greater impact.

Efficiency: Moderately Satisfactory

114. The governance of the project responded to the context and allowed participatory decision-making mechanisms to be put in place. Nevertheless, the timeliness of activities and products was negatively affected by both internal and external factors, including a rushed formulation (due to the need to align with donor procedures) and an unrealistic anticipated duration of project execution that resulted in a reactive approach that prevented proactive and innovative solutions to arising problems. Nevertheless, the project management made significant efforts when feasible to implement corrective measures and collaborate with other stakeholders that resulted in synergies and efficiency gains.

115. Most of the available budget had been used by the end of the implementation period but it was too early to determine the cost-effectiveness of the project, which will depend on its success in triggering long term sustained changes. The implementation delays and lack of capacity negatively affected the delivery of products and activities.

Sustainability: Moderately Satisfactory

116. The implementation status did not allow a thorough assessment of the sustainability and the project lacked a robust mechanism to measure impact. Despite a comprehensive exit strategy not having been envisaged, the project implemented some actions likely to contribute to the endurance of benefits at the outcome level.

5. RECOMMENDATIONS AND LESSONS LEARNED

117. From the above-presented findings, the FE drew three recommendations to contribute to the project's sustainability and impact:

Table 4 – TE recommendations

#	Recommendation	Responsibility	Timeframe
1	Advocate for and assist the FSM Government (e.g. through regular contacts and ongoing activities) in leading the development of concrete plans (including commitment of resources by different entities) to provide continuous technical support and training on operation and maintenance of equipment and infrastructure. This could involve a rapid response system to, for example, fix broken parts (e.g. antennas), purchase spare parts (including back-up batteries if necessary) and install ancillary equipment (e.g. lightning arresters for the radio systems in Pohnpei).	UNDP/FSM Government	By December 2023
2	Provide further support to develop monitoring systems to follow up on the status of the systems and help municipalities to maintain them. This should involve establishing strategic partnerships with key stakeholders at state level as well as national entities and other stakeholders (e.g. IOM) with local presence to provide direct assistance for proper maintenance of equipment and infrastructure.	UNDP/ FSM Government	By December 2023
3	Recommend the government to seek funding and establish strategic partnerships (e.g. ADB) to: - Ensure that the benefits of the project extend to the whole FSM population by installing radios in the remaining sites (including in additional outer islands) and a new system of chatter beetles; finalizing the NEOC/PSEOC buildings (including equipment); and replicating Weno's water scheme to other communities (Chuuk and other States). - Providing further support to put in place standard operating procedures and strengthen technical capacities and knowledge, including raising community awareness (e.g., technical assistance, workshops, discussions, surveys, etc.) This should involve implementing concrete actions to increase the engagement of women and youth in the use of and decision-making about equipment and infrastructure (e.g. specific training on using and maintaining radios for providers of health services).	UNDP/ FSM Government	By December 2023

118. Similarly, nine lessons useful for future programming and overall organizational learning were unearthed (including both best practices that contributed to strengthening the project implementation and shortcomings that jeopardized it):

Table 5 – FE lessons learned

#	Lesson learned
1	Develop a robust TOC that clearly identifies the linkages between activities/outputs and outcomes/impact. This should be reflected in a comprehensive Logical Framework, including SMART indicators at all levels.
2	Realistically estimate the implementation period, allowing sufficient time to (i) re-engage stakeholders and adapt the project design to any changes that have occurred after conceptualization; (ii) get any developed strategies validated/endorsed by the relevant authorities; (iii) define the technical specifications of highly specialized goods and equipment (including a more pro-active involvement of key stakeholders during the procurement process); etc.
3	Carrying out a thorough project mapping at inception could be an effective way to identify synergies, avoid duplication and increase ownership. It should involve direct engagement with and active participation of key stakeholders such as State Governments (especially when the construction of large infrastructure schemes is involved).
4	During the inception phase, it would also be desirable to conduct a needs assessment (at the household level) and baseline study to generate insightful information on vulnerability and resilience of the target communities. This would help improving the project design and implementation arrangements as well as assessing impact.
5	Develop fully-fledged gender and youth mainstreaming strategies recognizing that empowerment and increased participation require investments that aim to change socio-cultural norms.
6	Implement an improved monitoring and evaluation framework with strong focus on outcomes/impact to support accountability and adaptive management. In connection with the project activities, UNDP could develop a complementary learning agenda to address knowledge gaps in relation to vulnerability and resilience.
7	Develop an actionable exit strategy before the project ends. Ideally operationalization plans and concrete commitments should also be put in place (e.g. around maintenance).
8	Seek the support of other UNDP offices (e.g. Malaysia) to ensure that procurement notices are widely circulated and advertized reaching out to as many international suppliers as possible, and minimizing the risk of bidding failure.
9	From project formulation, or at the very beginning of project implementation, engage with other government offices and international partners to secure their support for specific project activities such as shipping equipment (e.g. TC&I, FSM Department of

#	Lesson learned
	Transportation, Communications and Infrastructure, National Fisheries Corporation, or International Organization for Migrations).

Annex 1 – Terms of Reference

Terms of Reference (Scope of Work)

Enhancing Disaster and Climate Resilience in the Republic of FSM through improved Disaster Preparedness and Infrastructure (EDCR)
FINAL PROJECT EVALUATION

Country:	FSM
Description of Assignment:	International Consultant to conduct the Final evaluation of the "**Enhancing Disaster and Climate Resilience in the Republic of FSM through improved Disaster Preparedness and Infrastructure**" Project in FSM under UNDP Pacific Office – FSM Sub Office
Period of assignment/services:	Up to 30 working days within February-March 2022 (incl. 3 days for the deskwork and preparation, 12-14 days in-country mission to FSM, 10 days for report finalization and presentation to the Country Teams of FSM and Fiji Pacific Office.
Duty station:	FSM
Type of Contract:	International Consultant

INTRODUCTION

The FSM EDCR project was launched in March 2019, for an initial period of 12 months, funded by the Japan Government Supplementary Budget and extended for 36 months with a completion date in March 2023. The project is implemented by UNDP Pacific Office as Direct Implementation, with the aim to enhance disaster and climate resilience in FSM through improved Disaster Preparedness and Infrastructure.

According to the UNDP Evaluation Policy every project with more than 5 million expenditures need to undertake a Terminal Evaluation. The aim of this evaluation is to assess the results achieved by the project "**Enhancing Disaster and Climate Resilience in the Republic of FSM through improved Disaster Preparedness and Infrastructure** Project in FSM in the timeframe April 2019 – March 2023.

SCOPE AND OBJECTIVES

The evaluation presents an excellent opportunity to assess the achievements of this project and its overall added value to disaster risks management in the Pacific. 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 any cross cutting and gender issues
- examination on the use of funds and value for money
- Assess the impact of COVID19 on project's implementation

The evaluation will be used for learning and accountability, and to contribute to the UNDP and Government of Japan decision-making regarding further engagement on this issue. The evaluation must apply any political sensitivity to the evaluation methods.

The Evaluation will assess the Project according to standard evaluation criteria, as elaborated below, in line with the OECD DAC Guidelines on Evaluating Disaster Risks Management Projects and United Nations Evaluations Group norms and principles.

- Relevance
  - The degree to which the objectives are (and continue to be) relevant vis-à-vis the disaster risks management and climate resilience, i.e. whether they address the key drivers of weak disaster risks management identified in the Theory of Change analysis.
  - Whether important disaster risks management gaps exist or opportunities are being missed?
  - Did the activities and strategies fit the objectives, i.e. is there internal coherence between what the programme is doing and what it is trying to achieve?
  - To what extent were the interventions relevant to the needs and priorities of the target groups/beneficiaries?
  - To what extent have gender, human rights and other cross cutting issues considerations been integrated into the project design and implementation

- Effectiveness
  - To assess the degree to which envisaged outputs and outcomes have been achieved and reported achievements, and whether the project has contributed to a reduction of the drivers of the conflict[26].
  - Was the theory of change based on valid assumptions?
  - the effectiveness of coordination and co-implementation between the UNCTs on both sides of the border
  - the degree of coordination and collaboration with the authorities on both sides of the border
  - Assess the degree to which project implementation was flexible and adaptive to the context.
  - To what extend did the FSM EDCR Project mainstream a gender dimension and support gender-responsive?
  - To what extent did the FSM EDCR Project complement work with different entities, , and have a strategic coherence of approach?
  - How have stakeholders have been involved in the programme's design and implementation?

[26] In terms of the achieved outcomes, an important caveat is that this review will not be able within its limited scope and timeframe to provide hard evidence for whether outcomes have been achieved. The review will base itself on existing data where possible, and will complement this with largely anecdotal evidence on these outcomes. For the purpose of this lessons learnt exercise this should be sufficient.

- Efficiency
  - Assess whether the Project has utilized Project funding as per the agreed work plan to achieve the projected targets.
  - Analyze the role of the Project Board and whether this forum is optimally being used for decision making.
  - Assess the timeline and quality of the reporting followed by the Project.
  - Analyze the performance of the M&E mechanism of the Project and the use of various M&E tools (any socio-economic data available to the project etc.).
  - Assess the qualitative and quantitative aspects of management and other inputs (such as equipment, monitoring and review and other technical assistance and budgetary inputs) provided by the project vis-à-vis achievement of outputs and targets.
  - Identify factors and constraints, which have affected Project implementation including technical, managerial, organizational, institutional and socio-economic policy issues in addition to other external factors unforeseen during the Project design.
  - To what extent did FSM EDCR project support achieve the results in its proposed timeline?
  - How efficient was the overall staffing, planning and coordination within the project (including between the two implementing agencies and with stakeholders? Have project funds and activities been delivered in a timely manner?
  - How efficient and successful was the project's implementation approach, including procurement and other activities?
  - How efficiently did the project use the project board?
  - How well did the project collect and use data to monitor results? How well did it communicate with stakeholders and project beneficiaries on its progress? Did it use data to inform its implementation strategy?
  - How well did the project communicate on its implementation and results?
  - Overall, did the FSM EDCR project provide value for money? Have resources been used efficiently?

- Sustainability and Impact
  - Assess preliminary indications of the degree to which the Project results are likely to be sustainable beyond the Project's lifetime (both at the community and government level), and provide recommendations for strengthening sustainability.
  - Did the intervention design include an appropriate sustainability and exit strategy?
  - How strong is the commitment of the Government and other stakeholders to sustaining the results of FSM EDCR support and continuing initiatives?
  - How has the project enhanced and contributed to the development of national capacity?

- National ownership

- Assess the degree of involvement of national partners, and aligning to existing priorities of the local government in targeted areas

- Lessons learnt/ Conclusions
  - An analysis of the main lessons learnt in relation to the effectiveness of foreseen strategies and theories of change to achieve a disaster risks management and climate resilience impact
  - An analysis of the main lessons learnt in relation to the effectiveness of implementation modalities

The review will cover the full period the project has been operational.

Methodology

The evaluation will be summative and will employ a participatory approach whereby discussions with and surveys of key stakeholders provide/ verify the substance of the findings. The evaluation will be based on gender and human rights principles and adhere to the UNEG Norms and Standards and Ethical Code of Conduct. Proposals submitted by prospective consultants should outline a strong mixed method approach to data collection and analysis, clearly noting how various forms of evidence will be employed vis-à-vis each other to triangulate gathered information.

Proposals should be clear on the specific role each of the various methodological approaches plays in helping to address each of the evaluation questions. The methodologies for data collection may include but not necessarily be limited to:

Rigorous desk review of documentation supplied by EDCR team based in FSM and Fiji including: Project documents, previous evaluations, project reports, key intervention reports and policies, etc. Where possible and relevant more detailed monitoring information will be analysed, such as community monitoring data and activity reporting.[27]

- Key informant interviews and focus group discussions, as appropriate, with major stakeholders (Interviews will be conducted in person or over video connection.) Stakeholders will be selected in close coordination with the UNCTs, and will at minimum include:
  - Government authorities with a key responsibility towards the project, including – primarily - relevant authorities at district level
  - UN RC, UNDP-Japan, an
  - Other implementing agencies, such as local NGOs
  - Other civil society organisations with no direct role in the project
  - Project beneficiaries in the village clusters, i.e. villagers, border guards, youth, women
  - Survey of key stakeholders, if relevant and direct observation in the field.

❖ *Desk research:*

❖ *Interviews & focus group discussions with stakeholders:*

These interviews can take place on an individual basis or in groups. Especially for the project beneficiaries, focus group discussions are envisaged.

[27] This data will only be included in the desk research when it is in a format that is accessible and relatively easily digestible for the reviewer.

All meetings and conversations will be held only once the appropriate approvals have been obtained, for which the UNDP will take primary responsibility. If approvals cannot be obtained on time, it is possible that some of these stakeholders may not be interviewed.

❖ *Validation*

The review findings will be presented to the UNDP FSM Sub Offices to collect feedback on these main findings, and serve as a validation exercise.

Products expected from the evaluation:
1) Inception report with finalized and agreed terms of reference, evaluation matrix, questionnaires and agreed methodology of evaluation (3 working days after beginning of assignment/contract);

2) A comprehensive evaluation report with findings, recommendations, lessons learned.

It is expected that draft report will be submitted to UNDP in two working weeks after in-country mission, and the final report with all comments and recommendations incorporated submitted to UNDP for final endorsement not later that in two working weeks after receipt of consolidated formal feedback with comments to a draft from the UNDP.

The draft Report and Final Reports: The Report should be logically structured, contain evidence-based findings, conclusions, lessons and recommendations, and should be free of information that is not relevant to the overall analysis. The Report should respond in detail to the key focus areas described above.

Presentation: For presenting and discussing the draft final report interactively, the consultants will facilitate a concluding workshop for the Project stakeholders.

Requirements for expertise and qualifications:

The review will be conducted by an international consultant. The international consultant should meet the following professional expertise criteria:

- Minimum Master's degree in a relevant area
- No less than 7 years' experience of conducting evaluations of strategies, policies and/or development programmes in the area of Disaster Risks Management and Climate Resilience;
- Knowledge of UN procedures and evaluation strategies will be additional asset;
- Good report writing skills, proven by evidence;
- Familiarity with the political, economic, social and gender situation in Pacific – FSM in specific would be an asset
- Fluency in English

The national consultant will be responsible for supporting the assessment methodology through field visits and interviews, focal group discussion in country and support the International consultant with team UNDP, and for the overall quality and timely submission of all the deliverables.

The evaluation will be fully independent, and led by the expert. The expert will ensure inclusive process of evaluation process and work in close coordination with the Integrated and Results Management Unit, Monitoring and Evaluation Officers (at the planning the evaluation, field work and report review process), and will be logistically supported by Project Manager of EDCR project. The Project Coordinator based in FSM will help facilitate contacts and set up meetings, and organize field visits. The participation of the UNDP staff in the review is required, as this will provide an instant opportunity for validating the findings and will assist in internalizing the learning..

Time Schedule and Deliverables

Tentative time schedule	**Period (all tbc)**
Initial desk research	5 Feb

TE detailed evaluation and logistics schedule and confirmation on schedule of interview, foreseen limitations informing inception report	10 Feb
Interviews in FSM	12-29 Feb
Field visits reports with supporting evidence informing draft Terminal Evaluation	1-10 Mar
Validation and Planning Workshop	15 Mar
Submission of final report	20 Mar

Deliverables		**Due date**	**Payment structure**
1	An interim report based on initial desk research	5 Feb	20%
2	A presentation of main findings at the final workshop	15 Mar	40%
3	A final report, max of 25 pages	20 Mar	40%

REPORTING REQUIREMENTS

Accountability and reporting:

1. The Consultant will report to Monitoring and Evaluation Analyst, UNDP Pacific Office in Fiji
2. All reports should be provided in both printed and electronic versions in English language, with the detailed description of the fulfilled tasks, according to the present Terms of Reference, and the direct contribution of the expert. Analytical documents, reports and notes developed by experts should be attached to the reports as annexes, which will serve as a justification for payment.

TRAVEL

This assignment requires travels to the regions of the countries. The tentative schedule is as following:

1) In-country mission to FSM – 8 days

- Travel to Chuuk State – 2 day
- Field mission in Chuuk State – 3 days
- Travel from Chuuk State to Pohnpei State– 1 day
- Field Mission in Pohnpei State – 2 days
- Travel to Home

All envisaged travel costs must be included in the financial proposal. This includes all travel to join duty station/repatriation travel. In general, UNDP should not accept travel costs exceeding those of an economy class ticket and daily allowance exceeding UNDP rates. Should the Consultant wish to travel on a higher class he/she should do so using their own resources.

In the case of unforeseeable travel, payment of travel costs including tickets, lodging and terminal expenses should be agreed upon, between the respective business unit and Individual Consultant, prior to travel and will be reimbursed.

ADDITIONAL REQUIREMENTS FOR THE RECOMMENDED CONTRACTOR

Statement of Medical Fitness for Work.

For an Individual Contractor who is of 62 years of age or older, and on an assignment requiring travel, be it for the purpose of arriving at the duty station or as an integral duty required under the TOR, a full medical examination and statement of fitness to work must be provided. However, this is not a requirement for individuals on RLA contracts

Where there is no UN office nor a UN Medical Doctor present in the location of the Individual Contractor prior to commencing the travel, either for repatriation or duty travel, the Individual Contractor may choose his/her own preferred physician to obtain the required medical clearance.

Inoculations/Vaccinations

Individual Consultants/Contractors are required to have vaccinations/inoculations when travelling to certain countries, as designated by the UN Medical Director. The cost of required vaccinations/inoculations, when

foreseeable, must be included in the financial proposal. Any unforeseeable vaccination/inoculation cost will be reimbursed by UNDP.

Security Clearance.

The Consultant should undertake the Basic Security in the Field (BSIF) training and Advanced Security in the Field (ASIF)
tests prior to travelling. These requirements apply for all Consultants, attracted individually or through the Employer.

SCOPE OF PRICE PROPOSAL AND SCHEDULE OF PAYMENTS

Contracts based on lump-sum

The financial proposal shall specify instalments and payment terms around specific and measurable (qualitative and quantitative) deliverables. Payments are based upon output, i.e. upon delivery of the services specified in the TOR. In order to assist the requesting unit in the comparison of financial proposals, the financial proposal will include a breakdown of each of the five instalments' amounts.

Preferred Currency of Offer: United State Dollars (USD)

For local contractors in FSM UNDP shall effect payment in USD based on the prevailing UN operational rate of exchange on the month of payment. The prevailing UN operational rate of exchange is

available for public from the following link: http://treasury.un.org/operationalrates/OperationalRates.aspx

UNDP CONTRIBUTION

2) UNDP Office vehicles for domestic travel;
3) Arranging field visits to meet with local counterparts and beneficiaries;
4) Project related documents such as Project Document, Annual Work Plans and/or Progress Reports, Board meeting minutes, Field monitoring reports, CDRs, HACT reports, Legal agreements, SESP/Risks update, M&E Plan, Gender Action Plan;
5) Security charges are not applicable.

Annex 2 – Evaluation Matrix

Category	Focus Areas/Issues
Relevance	• To what extent the objectives were (and continue to be) relevant vis-à-vis the disaster risks management and climate resilience? i.e. whether they address the key drivers of weak disaster risks management identified in the TOC analysis. • Did important disaster risks management gaps exist? Were opportunities being missed? • Did the activities and strategies fit the objectives? i.e. is there internal coherence between what the programme is doing and what it is trying to achieve? • To what extent were the interventions relevant to the needs and priorities of the target groups/beneficiaries? • To what extent have gender, human rights and other cross cutting issues considerations been integrated into the project design and implementation?
Effectiveness	• To what extent were achieved the envisaged outputs and outcomes? Has the project contributed to a reduction of the drivers of the conflict?[28] • Was the TOC based on valid assumptions? • Was there an effective coordination and co-implementation between the UNCTs on both sides of the border? • Was there an effective coordination and collaboration with the National and State authorities? • Was the project implementation flexible and adaptive to the context? • To what extend did the project mainstream a gender dimension and was gender-responsive? • To what extent did the project complement the work of/with different entities? Was there a strategic coherent approach? • How have stakeholders have been involved in design and implementation?
Efficiency	• Did the Project utilize the funds as per the agreed work plan to achieve the projected targets? • Was the role of the Project Board effective for decision making? • How was the timeliness and quality of the project´s reporting? • Analyze the performance of the M&E mechanism of the Project and the use of various M&E tools (any socio-economic data available to the project etc.). • Assess the qualitative and quantitative aspects of management and other inputs (such as equipment, monitoring and review and other technical assistance and budgetary inputs) provided by the project vis-à-vis achievement of outputs and targets. • Identify factors and constraints, which have affected implementation (e.g. technical, managerial, organizational, institutional and socio-economic policy issues in addition to other external factors unforeseen at design). • To what extent did the project achieve the results in its proposed timeline?

[28] In terms of the achieved outcomes, an important caveat is that this review will not be able within its limited scope and timeframe to provide hard evidence for whether outcomes have been achieved. The review will base itself on existing data where possible, and will complement this with largely anecdotal evidence on these outcomes. For the purpose of this lessons learnt exercise this should be sufficient.

Category	Focus Areas/Issues
	• How efficient was the overall staffing, planning and coordination within the project? (including between the two implementing entities and with stakeholders) • Have project funds and activities been delivered in a timely manner? • How efficient and successful was the project's implementation approach, including procurement and other activities? • How efficiently did the project use the PAB? • How well did the project collect and use data to monitor results? How well did it communicate with stakeholders and beneficiaries on its progress? Did it use data to inform its implementation strategy? • How well did the project communicate on its implementation and results? • Overall, did the project provide value for money? Have resources been used efficiently?
Sustainability and Impact	• Assess preliminary indications of the degree to which the results are likely to be sustainable beyond the project's lifetime (both at the community and government level), and provide recommendations for strengthening sustainability. • Did the intervention design include an appropriate sustainability and exit strategy? Was it developed/updated during implementation? • How strong is the commitment of the Government and other stakeholders to sustaining the results and continuing related initiatives? • How has the project enhanced and contributed to the development of national capacity?

Annex 3 – List of interviews

Name	Position	Organization/Department
Michael Yarofaitoar	Deputy Assistant for Response and Recovery	DECEM
John Guswel	Chief	Southern Yap Water Authority
Max Iriarte	General Manager	Sand Company
TR Mori		I-Solutions
Hairom Livaie	Former Director	Kosrae Department of Transportation and Infrastructure
Justin Fritz	Disaster Risk Coordinator	Chuuk Disaster
Kembo Mida		Chuuk Public Utility Corporation
Maho Inomata	Researcher/advisor	Japanese Embassy to FSM
Yasutaka Okamoto	Second Secretary	Japanese Embassy to FSM
Osamu Nedlic	Director	Kosrae Department of Transportation & Infrastructure
Liliak Melander	Director	Kosrae Department of Transportation & Infrastructure
Rinson Phillip	Chief	Kosrae Police Department
Nena William	Special Assistant for Disaster Management	Kosrae State Governor's Office
Joseph Ainstain	Chief	Fire and Emergency Services, Pohnpei
Patrick Carl	Director	Fire and Emergency Services, Pohnpei
Daniel Edgar	District Administrator	Nett Municipality (Pohnpei)
Eminner Johnson	Chief Rep. in Pohnpei	Mwoakilloa Municipality (Pohnpei)

Name	Position	Organization/Department
Zelnick Moses	Natural Resources Coordinator	U Municipal Government (Pohnpei)
Rofino Primo	Chief Minister	U Municipal Government (Pohnpei)
Collen Frank	Chief Magistrate	Sapwuahfik Municipality (Pohnpei)
Juity Hainrick	Chief Rep.	Nukuoro Municipality (Pohnpei)
Senard Leopald	Mayor	Nukuoro Municipality (Pohnpei)
Deturo Jake Dikepa	Assistant	Kapingamarangi Municipality (Pohnpei)
Cathrine Dickepa	Chief Rep.	Kapingamarangi Municipality (Pohnpei)
	Over 20 Mayors and Mayor Reps.	Northern Islands and Mortlock Islands

Annex 4 – List of supporting documents reviewed

- Project Document (PRODOC)
- Project Document Revision (Apr 2020)
- Annual Workplans (Nov 2019, Jul 2020, Nov 2020, Jun 2021, Nov 2021, Sep 2022 and Dec 2022)
- Annual Reports (2019, 2020, 2021 and 2022)
- Quarterly Progress Reports (Q1 2020, Q2 2020, Q3 2020, Q1 2021, Q2 2021, Q3 2021, Q1 2022, Q2 2022, Q3 2022 and Q1 2023)
- Inception meeting report and PAB Meeting minutes (x12)
- UNDP Social and Environmental Screening Procedure (SESP) updated in Jun 2021
- Quality Assurance Report
- Back to the Office Reports (Palau Aug 2019, Yap Oct 2019, Yoko Sep 2022, Bhesh Nov 2022, Kosrae Feb 2023, Bhesh Feb 2023, Yoko Feb 2023, Bhesh May 2023 and Yoko May 2023)
- Final Report of the activities implemented by Chuuk Public Utility Corporation (CPUC)
- Construction Inspection/Progress Reports (National Emergency Operation Center and Pohnpei State Emergency Operation Center)
- Presentation of the Improvement to Southern Yap Water Supply
- Recommendations for Sustainable Operation for the SYWA Water System

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[1]

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

Name of Consultant: Raul Guerrero

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 Madrid, Spain on 25 October 2023

[1] www.unevaluation.org/unegcodeofconduct