FP035

Climate Information Services for Resilient Development Planning in Vanuatu

Vanuatu

August 2021

Interim Evaluation Report

This report presents the Interim Evaluation of the Green Climate Fund (GCF)-funded project “Climate Information Services for Resilient Development Planning in Vanuatu”. The evaluation was independently commissioned by the Secretariat of the Pacific Regional Environment Programme (SPREP) and submitted to GCF. GCF assumes no responsibility for the accuracy of the information in this report.

Final Mid-term Review Report



Mid-term review of "Climate Information Services for Resilient Development in Vanuatu" (CISRD) or

Vanuatu Klaemet Infomesen blong redy, adapt mo protekt (Van-KIRAP) Project

By FCG New Zealand

August 2021

Final Mid-Term Review Report

Mid-term review of "Climate Information Services for Resilient Development Planning in Vanuatu" (CISRDP)

2018 – 2021

August 2021

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Executive Summary

Project name:	Mid-term review of "Climate Information Services for Resilient Development Planning in Vanuatu" (CISRDP) or Vanuatu Klaemet Infomesen blong redy, adapt mo protekt (Van-KIRAP) Project
Location:	Vanuatu
Donor:	Green Climate Fund (GCF)
Duration:	January 2018 – January 2022
Budget:	Component 1: (GCF US$9,842,043, co-financing US$1,323,292)
	Component 2: (GCF US$3,221,530, co-financing US$251,300)
	Component 3: (GCF US$1,990,655, co-financing US$116,400)
	Component 4: (GCF US$1,144,407, co-financing US$56,000)
	Component 5: (GCF US$1,908,270)

This report presents the findings, conclusion and recommendations of a mid-term review of the Climate Information Services for Resilient Development Planning in Vanuatu (Van-CIS-RDP), a Green Climate Fund (GCF) project implemented through the Secretariat of the Pacific Environment Programme (SPREP). The Project is implemented in the Republic of Vanuatu and managed by the Vanuatu Meteorological and GeoHazards Department (VMGD) and SPREP Climate Change Resilience Programme (SPREP CCR), (the Project Executing Agencies). Delivery Partners, including the Bureau of Meteorology (BOM) in Australia, CSIRO (Australia) and the APEC Climate Centre (APCC) in South Korea, provide specialised technical inputs to the Project.

The MTR was conducted by FCG New Zealand from May to July of 2021. The objective of the review was to review and assess the implementation of the Project since its commencement date on 10th January 2018 until 30th April 2021. The intended benefit of MTR is to promote project performance improvement, accountability, learning and evidence-based decision-making and management.

The review team used a mixed methods approach involving document review, stakeholder interviews and field visits. Data collection tools were based on the key MTR questions provided in the TOR and sub-questions developed by the review team. A total of 41 stakeholders were interviewed (26 in Vanuatu, 7 in Australia, 5 in ROK and 3 in Samoa). Of these 23 were female and 18 were male.

The review team was comprised of three members, one in Australia, one in New Zealand and one on the ground in Vanuatu. Stakeholder interviews were conducted remotely via Zoom (with delivery partners in Australia and ROK as well as stakeholders in Vanuatu). A local consultant conducted face-to-face stakeholder interviews in Port Vila and also conducted field visits in the Province of Sanma.

A summary of findings is provided in the table below followed by a list of recommendations.

Relevance: The Van-KIRAP Project in its original design did not clearly develop clear pathways to ensure CIS reached target sectors and beneficiaries. The project was reviewed and redesigned in 2019 and is now more relevant to the priorities and needs of target beneficiaries (sectors and communities).
Coherence: The Van-KIRAP Project is largely coherent with the overall efforts to progress climate resilient development in Vanuatu and, if it achieves its objectives, can provide an

invaluable resource that can enhance the impact of other projects working towards climate resilient development.
Effectiveness: The effectiveness of project delivery has been significantly hampered by a number of factors including: 1) the need to redesign the project to meet GCF FAA conditions and resultant delays in financial disbursements; 2) Disruptions caused by the travel restrictions imposed as a result of the COVID-19 pandemic, and; 3) the impact of Tropical Cyclone Harold. Despite this, there has been some progress in the delivery of Component One outputs and to a lesser extent Component Two. Development of sector case studies under Component Two has been slow and inconsistent. Components three and four have had limited delivery. As the project moves into the community level it will be important to draw on existing networks such as community disaster management structures coordinated by the NDMO as well as other civil society networks representing women (eg. Womens' weather network) and people living with a disability. This would enhance the inclusivity of the project activities as well as contributing to impact and sustainability. Project management effectiveness is constrained by having two Project Management Units as well as capacity constraints within them. The project will have to focus on getting sector case studies in place, as well as clear processes for the effective and inclusive dissemination of CIS through community climate centres, if it is to achieve its objectives by the end of the project.
Efficiency: Project approval delays, and the slow disbursement of funds severely impacted the efficiency of delivery of project activities. This was compounded by the impact of COVID-19 and Tropical Cyclone (TC) Harold. The management structure of two Project Management Units (PMUs) is also not conducive to efficiency.
Sustainability and Impact: The overall sustainability had been relatively well considered in the project proposal, but clear steps to ensure the sustainability beyond the project lifetime are not yet in place. The lack of clear exit strategy is a weakness that should be rapidly addressed and linked to the M & E plan which is under development. There should also be a clear plan how to embed the operations and maintenance responsibilities in organisations and departments annual plans and budgets. Project delivery has been delayed by various factors, and therefore the impact at outcome level, particularly in relation to community beneficiaries, is limited.

The summary of the key recommendations is provided below:

Project Management

Recommendation 1: GCF need to confirm the project extension to December 2023 ASAP. This will give clarity to project staff and allow them to focus on their tasks.

Recommendation 2: Delays in disbursement have been a major disruption to project implementation. GCF need to ensure the timely disbursement of scheduled funding once the required documentation submitted by the EE and IA to ensure no further disruptions in project implementation

Recommendation 3: There are currently two PMUs (one SPREP and one VMGD) located in different parts of Port Vila. This is not conducive to effective and efficient project management. **These two existing PMUs should merge and be located at VMGD premises**. There is already agreement between SPREP and VMGD on this and it **should be implemented by September 2021**. The current SPREP EE PMU CIS Technical Advisor should take a technical advisory role within the VMGD Project Management Units (PMU) and focus supporting the

collaboration between delivery partners and sectors, identifying the synergies in technical work and facilitating the collaboration. He would report to both SPREP and VMGD.

Recommendation 4: A project monitoring framework should be finalised by SPREP by September 2021.

Recommendation 5: The recruitment of a project management advisor (as per the TOR developed by SPREP PCU in January 2021) should also be concluded by September 2021 (subject to GCF approving project extension beyond January 2022). The project management advisor would support the PMU as well as the sectors in developing and implementing work plans. This individual should also have a good understanding of M&E and ensure project plans are aligned with the project monitoring framework once this is finalised. This position would also report to both SPREP and VMGD.

Recommendation 6: The VMGD PMU should establish a document sharing platform, for instance through Dropbox, which access should be shared with all project stakeholders. The key project documents and updates should be kept in the assigned folders, including any training material. Also clear guidelines in document sharing and naming should be developed through the platform, ensuring avoidance of duplication of efforts around project documentation and version control. This should be in place by September 2021.

Recommendation 7: The SPREP PCU should discuss with GCF (by September 2021) to include the VMGD PMU (including VMGD Director) in specific joint meetings. This would increase the transparency and minimise some misunderstandings and doubts that have arisen through possible miscommunications.

Recommendation 8: The Communications Coordinator to organise a monthly or quarterly newsletter on project activities conducted in the previous period (month/quarter) and activities planned in the coming period (month/quarter). This should be in a less formal “newsy” format that helps in keeping internal project stakeholders up to date on the range of project activities. This should start within one month of the Communications Advisor commencing employment.

Recommendation 9: VMGD PMU should have a gender and inclusion focal point as part of their team, who would be trained to work with the sectors and community climate centres to ensure mainstreaming inclusion into the operations. This should be in place by September 2021.

Sustainability

Recommendation 10: Training material and training modules, relevant to the key project roles that need to be embedded into VMGD and the sectors, should be in a central repository. The delivery partners could assist developing the materials and modules, and VMGD and SPREP should discuss with the DGs and directors of the key organisations how to ensure the embedding of these into the annual workplans and budgets. This is crucial in terms of ensuring transfer of the skills and sustainability. This should commence immediately and be reviewed by the PMU every three months.

Recommendation 11: The VMGD PMU (supported by a Project Management Advisor) should oversee the development of a Project Exit Strategy. The exit plan should include a clear roadmap how to initiate the process of VMGD and sectors including the funding of the ongoing O&M in their annual plans and budgets. This should be completed by December 2021.

Recommendation 12: Procurement of equipment needs to be underpinned by a well developed O&M plan by VMGD, including identification and training of relevant VMGD staff (supported by the relevant delivery partners) as well as allocation of sufficient ongoing budget.

Recommendation 13: The GCF budget has allocated USD 20,000 per annum for O&M of the radar but the externally conducted cost benefit analysis identified that O&M is typically in the range of 5-10% of the purchase cost on an annualised basis over the life of the equipment (up to 20 years). This would equate to something more like USD 100,000+ so the amount allocated

in the budget may have confused the issue and this will need to be clarified and addressed by VMGD. This will be a significant ongoing financial burden on VMGD.

Component 1

Recommendation 14: The digitised data should be saved in a cloud-based system. This doesn't only decrease the risk of losing data, but also increases its accessibility and sharing. VMGD to discuss with BOM on appropriate cloud-based system. This should be completed by December 2021.

Recommendation 15: Overall, greater access to the gathered data and VMGD databases should be ensured, and appropriate data sharing agreements signed and observed between the different government organisations, provincial actors, delivery partners and NGOs. In case the issue around the current sharing difficulties is ITC related, it needs to be recognised and actions taken to fill any gaps in terms of needed equipment or maintenance. This should be completed by December 2021.

Component 2

Recommendation 16: The PMU (*merged*) will need to provide additional support to the sector coordinators to ensure their case studies are in a position to maximise the inputs of delivery partners who will most likely be able to travel within 6-12 months. This is particularly important in relation to CSIRO who will need to finish on Van-KIRAP by Dec 2022 even if SPREP get a no cost extension beyond this date. This should be completed by December 2021.

Recommendation 17: VMGD's rollout of community climate centres should initially focus on the provincial level centres, and ensure linkage with sector case studies and well developed CIS dissemination and use strategies, before expanding to Area Council CCCs.

Recommendation 18: Community climate centres linkages should be more strongly embedded within civil society structures and community level networks (Red Cross, Women's Weather Network, disability associations and community structures (CDCCCs). Guidelines should be developed to include this as part of training of climate focal points. This would link with the Gender Action Plan (and gender focal point) and the traditional knowledge (TK) strategy. This will help ensure CIS is relevant to the community and accessible to different users including women, youth and people living with a disability. This should include outline of community feedback processes. This should be completed by December 2021.

Recommendation 19: Implementation of community climate centres should also be coordinated with NDMO, to ensure complementarity with NDMO work at PDC, AC and community disaster and climate change committee (CDCCC) levels.

Component 3

Recommendation 20: VMGD to ensure that processes of integrating TK into CIS is consistent with the TK Strategy. The TK Coordinator should work closely with the Communications Coordinator to develop clear protocols and strategies for integration of TK into CIS at community climate centres. This should be completed by December 2021.

Component 4

Recommendation 21: The M&E Plans needs to be developed around the revised results framework. The project management advisor should take responsibility for managing the process, but external support should be sought to create tailored plans for the project. It is understood simple templates have been created, but it is important to ensure these are responding to the GCF criteria, and supporting the annual reporting needs of SPREP PCU. This should be completed by December 2021.

Recommendation 22: The Gender Action Plan should also look at how the Community Engagement Strategy and Action Plan could be strengthened from a gender perspective. The VMGD PMU and the Community Coordinator should seek inputs from the Gender Consultant on this process. This should be completed by December 2021.

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Key report dates

Data Collection Dates:	9 June 2021 – 13 July 2021
Date Submitted:	Draft report submitted 26th July 2021 Comments received 28th July 2021, 4th August 2021, 5th August 2021 Final report submitted 19th August 2021

Acknowledgement

The review team would like to acknowledge all the project stakeholders who committed time in sharing their views on the Van-KIRAP Project delivery so far. In particular SPREP PCU, PMU and VMGD PMU have supported the team in arranging interviews and ensuring their teams availability for the several consultations. The review team would also like to acknowledge the patience of all the informants regarding the use of video conference tools to gather information, and flexibility around interview times. In addition, the review team is thankful for the time GCF staff has allocated for the discussions and for all their contributions.

Disclaimer

The themes of this report have been developed around the parameters of the project's own design objectives, and the review Terms of Reference. The findings and recommendations are based on the collection of monitoring documentation, and opinions of project beneficiaries, partners and staff. FCG New Zealand has attempted to triangulate data within the limits of the time and resources made available by the commissioning organisation. Nevertheless, FCG New Zealand shall not be liable for the accuracy of reporting data provided by the commissioning organisation or opinions expressed by stakeholders. The commissioning organisation is responsible for its own assessment and decisions about the applicability of conclusions and recommendations expressed by the evaluation report. FCG New Zealand will not be held responsible for decisions reached by the commissioning organisation's management, not the manner in which recommendations are implemented.

Ethics Declaration

Data collection and analysis was conducted in an ethical manner. Data collection and analysis approaches were designed to protect participants' privacy and wellbeing by establishing and following credible ethical evaluation principles:

Voluntarism, confidentiality and anonymity of participants: All participation in interviews were voluntary, did not create harm to participants during or after the data gathering, and their anonymity and confidentiality will be protected. Voluntary involvement was assured by a verbal explanation of the study being conducted. The script informed respondents that they may choose to not respond to certain questions and may end the interview at any time. No names were recorded on focus group discussions transcripts: only location names and the number of participants in the group. Where key informants have been quoted by name in the report, it has been done with their permission, sought at the time of interview. In workshops, while attendance lists were taken, comments and quotes cited in the report do not attribute them to specific participants: only to the collective workshop. All transcripts have been retained securely under password protection by the Team Leader.

Do No Harm: Project and evaluation themes were screened for topics and questions that may cause distress to some interviewees. Potential for harm was low, as key informants were generally senior managers with high agency. In key informant interviews and focus groups, participants were encouraged to only to reveal what they are comfortable sharing in public. In workshop settings, where the evaluators considered questions might have higher sensitivity, participants were asked to anonymously write down their reflections on the question, rather than verbalise them in group setting.

Integrity: Data from participants has been presented honestly and proportionately, such as the authoritativeness, extent-shared and intensity of opinions across the target participant cohort and aligning quotes with the evaluative themes intended by the informant. Unexpected or contentious findings will be triangulated with other forms of data to gauge significance. No material inducement was offered to any informants.

Participant perspective: To the extent possible, given logistical limitations of each context, preliminary findings with project stakeholders at country and regional to invite their reactions and interpretations.

Professional objectivity: The Team Leader, Climate Change Specialist & Evaluator and National Climate Specialist and Evaluator have completed and been cleared by a police check within the last two years; The Team Leader is a member of the Australian Evaluation Society and complies with its *Guidelines of Ethical Principals.*

Declaration of Conflicts of Interest

The independent consultant evaluators are not and never have been employees of SPREP and have no familial or financial relationships with any of its staff other than the contractual relationship in relation to this evaluation. We declare no conflict of interest exists.

Acronyms and abbreviations

ACCSP	–	Australian Climate Change Science Program
ADB	–	Asian Development Bank
APEC CC	–	Asia-Pacific Economic Community Climate Centre
CDCCC	–	Community Disaster and Climate Change Committee
CSIRO	–	Commonwealth Scientific and Industrial Research Organisation
CIS	–	Climate Information Science CISRDV – Climate Information Services for Resilient Development in Vanuatu
COSPPac	–	Climate and Oceans Support Program in the Pacific
DSS	–	Decision Support System
ENSO	–	El Nino Southern Oscillation
ESRAM	–	Ecological and Social Resilience Assessments and Mapping
FINPAC	–	Finnish Pacific Project
GCF	–	Green Climate Fund
GFCS	–	Global Framework for Climate Services
IPCC AR5	–	Intergovernmental Panel on Climate Change 5th Assessment Report
JICA	–	Japan International Cooperation Agency PDC Provincial Disaster Committee
PCCSP	–	Pacific Climate Change Science Program
PACCSAP	–	Pacific-Australia Climate Change Science and Adaptation Planning Program
PIFACC	–	Pacific Islands Framework for Action on Climate Change
PMC	–	Pacific Meteorological Council PRMG - Project Review and Monitoring Group
MLDBs	–	Multi-Lateral Development Banks
M&E	–	Monitoring and Evaluation
NMSs	–	National Meteorological Services NRM – Natural Resource Management
PICs	–	Pacific Island Countries
PICS Panel	–	Pacific Islands Climate Services Panel
RoK-PI CLIPS	–	Republic of Korea Pacific Islands Climate Prediction Services Project
SIDS	–	Small Island Developing States
SPC	–	Secretariat of the Pacific Community
SPCZ	–	South Pacific Convergence Zone
SPREP	–	Secretariat of the Pacific Regional Environment Programme
STI	–	Science, Technology and Innovation
StPC	–	Shifting the Power Coalition UNDP - United Nations Development Programme
UNFCCC	–	United Nations Framework Convention on Climate Change
USP	–	University of South Pacific
VANGO	–	Vanuatu Association of NGOs
VCCRP	–	Vanuatu Community-based Climate Resilience Programme
VCAP	–	Adaptation to Climate Change in the Coastal Zone of Vanuatu
VMGD	–	Vanuatu Meteorological and Geohazards Department Van-KIRAP – Vanuatu Klaemet Infonesen Blong Redy, Adapt Mo Protekt
WMO	–	World Meteorological Organisation
WWW	–	Women's Weather Watch

1 Introduction

1.1 Project Background

The Climate Information Services for Resilient Development Planning in Vanuatu (Van-CIS-RDP) or Vanuatu Klaemet Infomesen blong redy, adapt mo protekt (Van-KIRAP) Project (henceforth Van-KIRAP), is a four and a half year, full size Green Climate Fund (GCF) project implemented through the Secretariat of the Pacific Environment Programme (SPREP). The Van-KIRAP Project is implemented in the Republic of Vanuatu and managed by the Vanuatu Meteorological and GeoHazards Department (VMGD) and SPREP Climate Change Resilience Programme (SPREP CCR), (the Project Executing Agencies). Delivery Partners, including the Bureau of Meteorology (BOM) in Australia, CSIRO (Australia) and the APEC Climate Centre (APCC) in South Korea, provide specialised technical inputs to the Project.

The Van-KIRAP Project Objective is to "increase the ability of decision makers, development partners, communities and individuals across five target sectors (agriculture, fisheries, infrastructure, tourism and water) to plan for and respond to the long- and short-term impacts of climate variability and change". The Project is responding to priorities identified in the Vanuatu Framework for Climate Services (2016) and the VMGD Strategic Development Plan 2014–2023.

The Project is building capacity to harness and manage climate data, develop and deliver practical Climate Information Services tools, support the coordination and dissemination of tailored information, enhance CIS related information technology and infrastructure, improve the accessibility of CIS to sectors and communities and support the application of CIS through real-time processes. The Project began implementation in January 2018 but underwent a review in early 2019 to ensure that the project was still relevant to align with the emerging priorities of the target sectors and government priorities. This resulted in changes to the number and structure of Components.

This work is achieved through activities delivered under each of the project's four Components (plus project management as a fifth Component):

- **Component 1:** Strengthen the VMGD platform to provide quality climate data and information for CIS;
- **Component 2:** Demonstrating the value of CIS at the sectoral and community levels;
- **Component 3:** Development of CIS tools and engaging with stakeholders through outreach and communications;
- **Component 4:** Strengthening the institutional capacity for long-term implementation of CIS in decision-making; and
- **Component 5:** Project Coordination and Management.

1.2 Objective of the Review

SPREP has commissioned the independent MTR, with the key purpose to review and assess the implementation of the Van-KIRAP Project since its commencement date on 10th January 2018 until 30th April 2021. The overall benefit of MTR is to promote project performance improvement, accountability, learning and evidence-based decision-making and management. The review will look at the Project design and implementation activities broadly, identifying strengths and weaknesses as well as opportunities and risks of the Project. By evaluating the adequacy and effectiveness of its implementation and delivery of project outputs and outcomes to date, the review will also assess the effectiveness of partnership arrangements. In addition to the project outputs and outcomes, the relevance of the Project for Vanuatu's strategies and plans will be assessed and opportunities to strengthen the linkages explored.

The evaluation lessons will be used to make detailed recommendations for the remaining Project period, outlining any necessary adjustments needed to refocus the Project and reorganise the management of the execution of activities, and consequently ensure the desired outcomes are achieved during the remaining project timeline.

To summarise, the MTR will qualitatively and quantitatively review the following elements of Project performance:

1) Overall performance and the likelihood of achieving the PO by project closure.
2) Implementation progress according to the indicators and targets listed in the Results Framework including any underlying causes and issues contributing to targets that are not adequately achieved.
3) Sustainability of the Project's outputs and expected outcomes.
4) Major constraints affecting implementation and identification of viable solutions.
5) Any delays in project implementation, their causes, and draw lessons from the delays and provide recommendations for improved implementation to avoid further delays going forward and to ensure achievement of the project objectives.
6) Project management and effectiveness of the Project Executing Agencies and other institutional implementation units and actors (e.g., Sectors, delivery partners, coordinators).
7) Project supervision and implementation support performance of the SPREP.

The specific mid-term review questions can be found in Annex 3, TOR of the assignment.

1.3 Review Methodology

The FCG NZ review team used a mixed methods approach involving document review, stakeholder interviews and field visits. Data collection tools were based on the key MTR questions provided in the TOR and sub-questions developed by the review team (see Annex #). A total of 41 stakeholders were interviewed (26 in Vanuatu, 7 in Australia, 5 in ROK and 3 in Samoa). Of these 23 were female and 18 were male (list of stakeholders in Annex 1).

The review team was comprised of three members, one in Australia, one in New Zealand and one on the ground in Vanuatu. Stakeholder interviews were conducted remotely via Zoom (with delivery partners in Australia and ROK as well as stakeholders in Vanuatu). A local consultant conducted face-to-face stakeholder interviews in Port Vila and also conducted field visits in the Province of Sanma.

1.4 Review Limitations

Due to the COVID-19 pandemic and constraints on international travel two members of the review team were unable to travel to Vanuatu and had to conduct consultations remotely.

2 Findings

2.1 Relevance

The Van-KIRAP Project in its original design did not clearly develop clear pathways to ensure CIS reached target sectors and beneficiaries. The project was reviewed and redesigned in 2019 and is now more relevant to the priorities and needs of target beneficiaries (sectors and communities). The revised project is still an ambitious one in the Vanuatu context and will need a strong focus on project delivery to ensure that objectives are met.

Vanuatu is highly exposed to climate hazards and consistently rates as the country with highest disaster risk in the world, according to the UN University World Risk Report[1]. Climate change amplifies these risks and addressing these risks is of the highest priority for the Government of Vanuatu (GoV).

The Climate Information Services for Resilient Development in Vanuatu Project (Van-CIS-RDP or Van-KIRAP as it is known in Vanuatu) seeks to ensure that Vanuatu has a robust system of Climate Information Services (CIS) that can contribute towards the achievement of national climate mitigation and adaptation objectives. The Project began implementation in January 2018 but underwent a review in early 2019 to ensure that the project was still relevant to align with the emerging priorities of the target sectors and government priorities.

The original Project design was more focused on the enhancement of CIS capacity within VMGD but the outputs to ensure that CIS reached target sectors and beneficiaries were not clearly developed. The original design had the following Components:

- Component 1.0: Capacity Development
- Component 2.0: User Interface Platform
- Component 3.0: Climate Information Services System
- Component 4.0: Observations & Monitoring
- Component 5.0: Research, Modelling & Prediction

After the review in early 2019, Components and outputs were redesigned with a revised Logical Framework, Theory of Change and workplans. The revised framework had the following redesigned Components:

- Component 1: Strengthen the VMGD platform to provide quality climate data and information for CIS
- Component 2: Demonstrating the value of CIS at the sectoral and community levels
- Component 3: Development of CIS tools and engaging with stakeholders through outreach and communications
- Component 4: Strengthening the institutional capacity for long-term implementation of CIS in decision-making

The redesigned project better aligns with and supports the Government of Vanuatu's strategic policy objectives. The overarching strategic guiding document for development policy in Vanuatu is ***Vanuatu 2030 – The People's Plan: National Sustainable Development Plan 2016 to 2030***. This document was published in 2016. *The People's Plan* sets out the national priorities and context for the implementation of the global Sustainable Development Goals. The Plan has three pillars – Society, Environment and Economy. The objective of Van-KIRAP aligns with Component 3 of the environment pillar - Climate and Disaster Resilience, which has a number of policy objectives aimed at enhancing resilience and adaptive capacity to climate change and natural disasters.

[1] https://reliefweb.int/sites/reliefweb.int/files/resources/WorldRiskReport-2020.pdf

All other national policies are supposed to align with and support the overarching objectives of the *People's Plan*. In the context of the Van-KIRAP Project, the relevant policies and strategic frameworks include:

The ***Vanuatu Climate Change and Disaster Risk Reduction Policy 2016-2030*** **(SPC 2015)**. This policy sets the framework for mainstreaming climate change and disaster risk reduction into sustainable development processes for Vanuatu. The policy identifies the joint/integrated governance role of the *National Advisory Board* (NAB) on *Climate Change and Disaster Risk Reduction* and the VMGD for purposes of implementing the policy, along with sectoral capability such as the *Ministry of Agriculture Risk and Resilience Unit*.

This policy has a number of strategic priorities that the Project seeks to fulfill, including:

- Strengthen existing systems to improve information capture, access and application (Component 1 of Van-KIRAP)
- Enhance data analysis and strengthen research activity and capacity (Component 1)
- Develop and implement strategic and business plans integrating risk (Component 2)
- Strengthen risk assessment processes and address site-specific climate and disaster vulnerabilities (Component 2 and 4)
- Build on and share existing TK and expand its use (Component 3)

VMGD itself is guided by the **Vanuatu Meteorology and Geohazards Department *Strategic Development Plan*** *2014-23* (VMGD 2014) which sets the strategic context and direction for strengthening the capacity of the VMGD, with emphasis on developing and supporting "…state of the art technical services…" collectively through enhanced capacity, coordination and partnerships. The Strategy focuses on the following priorities (amongst others):

- Improved weather, climate and climate change services (including across multiple hazards, stakeholders and time frames) (Component 1, 2 and 3)
- Improved observations and associated monitoring networks (Component 1)
- Enhanced capacity for both administrative/project management and research and development, outreach and communications (Component 4).

Most specifically, the Van-KIRAP Project aligns with the **Vanuatu Framework for Climate Services (VFCS)** (SPREP 2016). This document is principally guided by the five pillars of the GFCS, the VMGD Strategic Development Plan and by various national level stakeholder consultations. The stated goal of the VFCS is to "…ensure climate services for Vanuatu are of world-class standard, sustainable, are reaching all end-users, and are effectively helping people manage and adapt to climate variability and change in Vanuatu (SPREP 2016).

According to one of the delivery partners for Van-KIRAP the underlying framework that informed the development of the VFCS has become quite dated as the model mainly just generates data and does not look at risk and resilience adequately. The work being done under Van-KIRAP is more advanced than this and highly relevant to the Vanuatu context.

One activity under component one involves the procurement and installation of a Doppler radar. This is a high-cost item that does not seem well integrated into the overall project (but is of importance to the Government of Vanuatu for its broader EWS capacity improvement). The GCF has put a number of conditions in place that appear to make it extremely difficult, if not impossible, for this item to be purchased.

2.2 Coherence

The Van-KIRAP Project is largely coherent with the overall efforts to progress climate resilient development in Vanuatu and, if it achieves its objectives, can provide an invaluable resource that can enhance the impact of other projects working towards climate resilient development.

As discussed previously in the relevance section, the Van-KIRAP Project is well aligned with the relevant Government of Vanuatu policies and strategic priorities. The Van-KIRAP Project's focus on developing CIS products and processes that are relevant and accessible to sectors and communities can provide a strong foundation for other projects focused on climate and disaster resilience at the sector and community levels to draw on.

The Project has potential complementarity with other current and proposed programmes implemented in Vanuatu. One of these is "Vanuatu Coastal Adaptation Project" (VCAP) implemented by UNDP. The objective of VCAP was to build climate resilience in coastal communities through improved infrastructure, sustainable livelihoods and increased food production. The project concluded in 2019 but VCAP2 commenced in 2021. A key focus of the VCAP project was supporting Area Councils to establish Emergency Operation Centres and develop Disaster Management Plans. This aspect can be complementary to Output 2.2 of Van-KIRAP (CIS is incorporated into community practices). VMGD is already planning to align with VCAP outputs, for example one of the proposed CCCs is to be co-located in the VCAP supported building in Loh Area Council, Torba Province (Gibson, 2021).

One of the major challenges noted in VCAP's lessons learnt report was that community expectations were high although community level commitment was sometimes missing. These challenges were to some extent overcome through partnerships with provincial government authorities to engage communities. A further recommendation was to include other provincial partners. This can help inform how Van-KIRAP implements Output 2.2. VCAP 2 is implemented in partnership with the Vanuatu Ministry of Climate Change so coordination and ensuring complementarity should not be challenging as this is the overarching Ministry which also includes VMGD.

Another project that is still in the development phase is the Vanuatu Community-based Climate Resilience Programme (VCCRP) which is at concept note stage with GCF. This proposed project will be complementary with Output 2.1 (CIS implemented in target sectors) Output 2.2 (CIS is incorporated into community practices) and Output 3.1 (TK is incorporated into Climate Information Services in Vanuatu). VCCRP plans to work in 29 of the most vulnerable Area Councils in Vanuatu. These would be in addition to Area Councils targeted by Van-KIRAP therefore VCCRP has the potential to greatly expand the impact of Van-KIRAP, assuming Van-KIRAP achieves its objectives. VCCRP is also planning to implement in partnership with MCC so ensuring complementarity with Van-KIRAP should ensure the avoidance of duplication. According to SCA:

> *We would see our project as linking with CIS through strengthening the capacity of local government and community level actors to be able to access and utilise CIS. Ideally we will just be using Van-KIRAP CIS to develop and distribute and providing training to communities and local gov in its use.*

The review team are not aware of any other projects that Van-KIRAP potentially duplicates. As long as the Van-KIRAP PMU coordinates effectively with VCAP 2 and VCCRP (if and when it becomes operational) the projects should be complementary and lead to enhanced impact. There are a number of ongoing projects, implemented by NGOs and the Red Cross in coordination with the NDMO, that focus on community-based disaster risk reduction (DRR) and climate change adaptation funded by various donors including DFAT, EU and USAID. These are generally implemented through community level structures called Community Disaster and Climate Change Committees (CDCCC). Coordination with these activities (through NDMO) has the potential to also enhance the impact of Van-KIRAP at the community level.

2.3 Effectiveness

The effectiveness of project delivery has been significantly hampered by a number of factors including: 1) the need to redesign the project to meet GCF FAA conditions and resultant delays in financial disbursements; 2) Disruptions caused by the travel restrictions imposed as a result

of the COVID-19 pandemic, and; 3) the impact of TC Harold. Despite this, there has been some progress in the delivery of Component One outputs and to a lesser extent Component Two. Development of sector case studies under Component Two has been slow and inconsistent. Components Three and Four have had limited delivery. Project management effectiveness is constrained by having two PMUs as well as capacity constraints within them. The project will have to focus on getting sector case studies in place, as well as clear processes for the effective and inclusive dissemination of CIS through community climate centres, if it is to achieve its objectives by the end of the project.

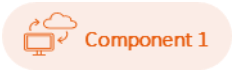
2.3.1 Overview of section and outcomes

Overall progress of project implementation has been slow and there are a number of reasons for this. The three main reasons are 1) GCF approval on submitted documentation in relation to the FAA conditions, in particular delays in funding disbursements, 2) The global COVID-19 pandemic causing disruptions to travel and supply chains, and 3) Cyclone Harold which struck northern Vanuatu in April 2020. Another factor has been the turnover of Directors at VMGD (three in three years) which has affected leadership and direction of the project. The project was scheduled to conclude in January 2022 but a request for extension to December 2023 is currently awaiting formal approval from GCF. The delays in disbursements have been particularly disruptive and has resulted in suspension of activities over significant periods, including by the delivery partners. The delays in approvals has also negatively impacted on the relationship between VMGD and SPREP, as VMGD has seen the delay as originating with SPREP as much as the GCF.

Due to the extent of delays in the project it is too early to discern much progress towards overall outcomes. This section will instead focus on the effectiveness of the delivery of outputs as well as analysis of factors affecting progress in delivering outputs (a table containing a summary overview of progress against output indicators according to the Project Logical Framework is found in Annex 3).

2.3.2 Effectiveness of output delivery

Component 1 Strengthen the VMGD platform to provide quality climate data and information for CIS



Output 1.1 - Strengthening Climate Information Services through improved data and interfaces

A key activity under this output is digitalising and homogenising historical climate data. This activity is going well. VMGD has employed three climatologists to conduct this work and it also has support from students. The Project recently purchased a large scanner which will further speed up the work. BOM provided in-country training and capacity building for this activity and has remained engaged remotely since COVID prevented travel. The COVID related travel bans disrupted plans for in-country training in 2020 and BOM worked on developing online training modules for remote learning. There were further delays in the second half of 2020 due to disbursement delays, but this output is progressing more effectively in 2021. According to BOM: *Overall the work is sound and we are confident we will have good outcomes there*. The climatologists themselves are engaged with the work but are currently concerned with the lack of clarity on the Project extension and whether they will be able to complete their work by the current official project completion date of January 2022. GCF providing clarity on this extension would be beneficial to all project staff.

Data management from this output is currently stored on in-country servers but there is a risk here that could be mitigated by back up onto cloud-based servers. VMGD seem to be hesitant to adopt this, however it is strongly recommended by BOM who have a Pacific wide program (funded through COSPPac) supporting national meteorological services to move to cloud-based storage. Although this cloud-based storage is dependent on ongoing Australian government funding, it is extremely unlikely that this funding would ever be withdrawn as this

would negatively impact meteorological services in nearly all Pacific Island countries. Another challenge around data has been timely sharing of VMGD data with delivery partners. Both APCC and BOM have been having challenges here despite data agreements being in place with VMGD. This should be clarified between the VMGD PMU and the delivery partners to ensure effective collaboration.

The Vanuatu Climate Futures portal is now being referred to as the Van-KIRAP platform (indicating a degree of local ownership) and is currently under development by CSIRO. This "back office" work is not readily apparent to the end user but modelling platforms are expected to be in place in 6-12 months.

Output 1.2. Research, Modelling and Prediction to Support CIS Tools and Uptake

A focus of this output has been on upgrading and strengthening the Vanuatu observational networks but only a limited number of observational equipment has been procured and installed due to disbursement delays, as well as COVID related travel disruptions.

Agromet stations were installed and operational on Santo and Efate with technical support from APCC. These stations are believed to have been damaged by TC Harold in April 2020 and are no longer operational due to unknown reasons. Due to COVID travel restrictions neither APCC nor the company that provided them have been able to come and identify the issue and repair the units. This points to a sustainability issue regarding in-country technical capacity to maintain this equipment as well as other equipment yet to be procured. Once travel restrictions are lifted, APCC intends to visit the sites to identify the issues and resolve them, and will work towards capacity building of the staff who will be maintaining the equipment.

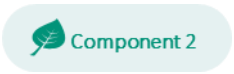
Site assessments for other observational equipment (river monitoring gauge, ocean buoys, automatic rainfall gauges) has been completed and procurement is in process. There were additional conditions placed (by the GCF) on the procurement of the radar for expanding Vanuatu's early warning system. These conditions included the commissioning of a cost benefit analysis (CBA) and a requirement for five quotes to be provided before procurement of a radar. The CBA has been completed and approved by the GCF. The next stage of the process according to the most recent project report is:

> *Executing Entity* [VMGD] *is to prepare a report for submission to IA outlining existing infrastructure and necessary platforms for the installation of the radar. The report is to provide details of timelines if infrastructure and platforms are to be put in place, and evidence of budgetary appropriations in which these will be funded through. Depending on the results of the report, a decision will then be made to move to the next step of the process which is the obtainment of five quotes for the C-Band radar*.

These conditions seem appropriate apart from the expectation that a suitable platform for the radar be in place before obtaining five quotes. The dimensions of the platform will need to be specific to the selected radar (bolt hole position etc.) and therefore would logically be procured at the same time as the radar or separately once a specific radar has been selected. However, a bigger obstacle is likely to be "evidence of budgetary appropriations" as the operation and maintenance budget is likely to be significantly larger than envisaged. This will be discussed further in the efficiency section.

The requirement for five quotes will be difficult if not impossible to achieve in the Pacific as suppliers able to service this region will be limited. However, the radar does not appear to be central to the achievement of project outcomes and it may have been more straight forward for the GCF to have just rejected this activity rather than put insurmountable obstacles in the way.

Component 2 Demonstrating the value of CIS at the sectoral and community levels



Output 2.1 - CIS implemented within target sectors

The Project design identified five target sectors within which to implement CIS – agriculture, fisheries, infrastructure, water and tourism. These five sectors were to design and implement case studies that would demonstrate how CIS contributes to climate resilient development within those sectors.

The Project recruited five sector coordinators to oversee the design and implementation of a case study within their sectors. At the time of this review, the case studies are at varied stages of development, and all have suffered due to delays in disbursement. The people who were recruited as sector coordinators were more used to implementing a clearly defined workplan rather than designing a case study and this was a challenge they themselves identified. Delays in disbursement also hampered their ability to carry out any activities which caused demoralisation and two of the five coordinators left (fisheries and infrastructure, a new fisheries coordinator has been recruited but the infrastructure position was unfilled at the time of this review).

All of the sectors have identified sites for case studies with the agriculture sector being the most advanced in terms of implementing case study activities. The sites selected in each of the sectors represent a broad range of climate zones from the cooler south to the warmer north.

All of the sector coordinators reported challenges in dealing with Project bureaucracy which was exacerbated by having two PMUs in two different locations. The sector coordinators had support from their agencies to conduct Van-KIRAP activities but felt they were working in isolation with little understanding of what other sectors were doing and they would like more coordination and sharing of information.

From the delivery partners perspective, the in-country workshops in 2019 were a good opportunity to get to know everybody and form the relationships to underpin ongoing collaboration. Since the COVID travel restrictions all training and interactions between delivery partners and Vanuatu stakeholders have been virtual only. This seems to be having less of an impact on Component One activities but is more acute with Component Two, particularly the sector case studies. One delivery partner complained that the case studies seem to be constantly changing.

Another delivery partner said that it has become difficult to engage with the sector case studies without being able to travel to Vanuatu: *Sometime in the next 6 months we need to conduct some ground truthing of sector case studies. These can road test CIS in sector case studies and then get feedback from the sectors. When we can get on the ground sectors need to have case studies up and running so we can integrate CIS in a seamless way*.

Travel in the South Pacific remains restricted but as vaccination programs ramp up over 2021 it may be possible to travel in 2022 (travel recently reopened between Australia and New Zealand and between New Zealand and the Cook Islands). In the meantime, sector case studies will need to be more ready for “road testing” of CIS in the sector case studies. The PMU(s) will need to provide additional support to the sector coordinators to ensure their case studies are in a position to maximise the inputs of delivery partners who will most likely be able to travel within 6-12 months. This is particularly important in relation to CSIRO who will need to finish on Van-KIRAP by December 2022 even if SPREP gets a no-cost extension beyond this date.

Output 2.2 - CIS Is Incorporated into Community Practices

This output seeks to establish a Vanuatu network of community-based climate change focal points and a network of 12 Climate Centres (two in each Province – one at provincial level and one at Area Council level). The Climate Centres will also link with the five sector case studies.

They provide a crucial resource for CIS to be disseminated in an understandable and usable form to the community.

The initial site assessments were conducted in 2019 in consultation with the Department of Local Affairs (DLA) and the NDMO. A Community Engagement Strategy and Action Plan was finalised in 2021. The aim of the engagement strategy is to:

1. Establish a two-way communication platform to channel CIS information from sectors and VMGD to communities;
2. Provide a mechanism for communities to provide feedbacks on the impact of the use of climate information services;
3. Provide a platform for continuous engagement between stakeholders and communities through continuous awareness and outreach programs at the community level; and
4. Establish a long-term sustainable plan to allow the continuation of partnership and engagement with sectors and communities.

The first criteria for the selection of community climate centres is that it is an existing facility / building in good working condition. One of the criteria for a Climate Focal Point is that they are an active member of a community council or network (voluntary rainfall network, community disaster and climate change committee (CDCCC), Red Cross Volunteer, etc). These are sound criteria. The first ensures that the Project is using existing local government resources and the second ensures that the focal point is already embedded within the kind of networks that are crucial to the dissemination of CIS at the community level.

The focus of the community engagement strategy is mainly around the operation of community climate centres at the community level and little discussion with how they will be integrated at the provincial level. The Climate Centres will also need to engage with the sectors to coordinate and distribute findings from sector case studies. Given the challenges already outlined in developing and finalising sector case studies it will be important to ensure that processes for coordinating and distributing findings of sector case studies (as well as ensuring broader mechanisms for effective CIS dissemination and use) are robust at the provincial level. It is the view of this review that it would be important to focus on getting one functioning climate centre at the provincial level in each of the six provinces before going down to Area Council level where capacity constraints will be even more pronounced. The NDMO has invested in considerable capacity building at the provincial level through establishing Provincial Disaster Committees and appointing Provincial Disaster Officers. Van-KIRAP could work through this structure to ensure CIS processes are relevant, understood and inclusive at the provincial level before expanding down to the community level.

Having a well-functioning model of community climate centres in place at the provincial centre will provide a solid basis for expanding out to the Area Council level. This could then link with other planned Area Council level initiatives such as VCAP 2 and VCCRP to increase impact. Implementation of community climate centres should also be coordinated with NDMO, to ensure complementarity with NDMO work at provincial, Area Council and community levels. This involves the recent work around establishing a variety of mechanisms for DRR, EWS and communication that link NDMO with PDC as well as AC and CDCCCs. NGOs work closely with NDMO to support the establishment of CDCCCs which would be a key user and disseminator of CIS at the community level.

It will be important to have a clear plan about how CIS is going to link to the broader community and also ensure that information is accessible to different users including women, youth and people living with a disability. A particularly important network to link with women is the Women's Weather Watch in Vanuatu, part of a broader Pacific (and global[2]) network of grassroots women who cover about 25% of Vanuatu and already engage with VMGD.

[2] https://public.wmo.int/en/resources/gender-equality/making-weather-and-climate-services-more-gender-sensitive

This process will require linking the community engagement strategy with the Gender Action Plan as well as a communication strategy. Mainstreaming inclusion into the rollout of CCCs is crucial: ***"****The potential of this project, and the biggest negative impact is that in enforces all the gender relationships and inequalities that already exists."* It will be important to discuss and collaborate more with the key community-based organisation to ensure inclusivity of the actions. Having a gender focal point at the PMU could assist this process.

Output 2.3 - A Socio-economic Benefit Analysis for Vanuatu Using the Customised Pacific CIS Cost Benefit Framework Is Produced

This output was delayed during 2020 but is underway and ongoing.

Component 3 Development of CIS tools and engaging with stakeholders through outreach and communications



Output 3.1 - TK is incorporated into Climate Information Services in Vanuatu

This output builds on a longstanding collaboration between VMGD and BOM so had a sound foundation at the start of the project. The traditional knowledge (TK) Strategy has been developed. Part of the intention of this document is to ensure that other delivery partners are aware of the sensitivity around TK data, that it is not just like other climate data and that there are sensitive cultural and legal protocols around the collection of TK data.

The project has nominated four sites for TK collection that are in different parts of Vanuatu. Expansion of the network was delayed due to funding delays and it was not clear to the review why this output seemed to be more impacted than other aspects of the Project.

The Agriculture case study has started to incorporate the TK team in its work but it is less integrated in the other sectors which is consistent with the overall progress of sector case studies. This will need further attention as sector case studies are further elaborated.

Output 3.2 - Development of CIS Tools And Information Products & Output 3.3 - Implementing Knowledge Management, Engagement And Outreach Across Sectors And Communities

Outputs 3.2 and 3.3 are in the very early stage of implementation. A Communications Coordinator was in the process of being recruited at the time of the review. There is a strong need for improved communication within the extended Project team as well as to external stakeholders and wider audiences. The Communications Coordinator will also need to work closely with the TK Coordinator to ensure communication protocols for CIS dissemination at the community level are consistent with the TK Strategy.

Component 4 Strengthening the institutional capacity for long-term implementation of CIS in decision-making



Output 4.1 - Institutional capacity to implement CIS across sectors strengthened

A policy and legislation review of the five sectors was conducted in 2019. A CIS training manual was developed and was planned to be delivered to target sectors in 2021.

This output includes an activity around building institutional and project capacity in monitoring and evaluation, environmental and social safeguards, and gender. The Project has not had a dedicated M&E position but GCF's Independent Evaluation Unit (IEU) in 2018 had proposed to include Van-KIRAP in its piloting of an impact evaluation framework. What was proposed by the IEU seemed overly complex to SPREP and this was not progressed. Instead IEU has been supporting SPREP in the development of an M&E framework which is only now in the final stage of development.

A Gender Assessment was completed in 2020 which was to inform the development of a revised Gender Action Plan (GAP). This was currently underway at the time of the review. The

GAP could also look at how the Community Engagement Strategy and Action Plan could be strengthened from a gender perspective.

Output 4.2 - Training of Personnel Leads to Strengthening Of Institutional Capacity

A training needs assessment was conducted in late 2019 but Implementation was delayed due to funding delays and COVID travel restrictions. A training programme is currently under development and most training is currently conducted informally until this is in place. There is a strong need to ensure that skills and systems are institutionally integrated into VMGD not just embedded with particular individuals who may leave the organisation taking that increased capacity with them.

There is also a strong need to ensure that training includes operation and maintenance of equipment procured through the project. This need has been highlighted by the experience of the agromet stations in the agriculture sector case studies discussed previously.

Component 5 Project management effectiveness

Component 5

The original design outlined the institutional/implementation arrangements with SPREP as the accredited entity with overall responsibility for delivery of the project. This is SPREP as the Implementing Entity. This role was oversighted by SPREP's Project Review and Monitoring Group and is now the function of the Project Coordination Unit (PCU). The project design also designated two executing agencies, VMGD and SPREP, each with their own Project Management Units (PMU). The VMGD PMU is directly managed by the Director of the VMGD (who is also accountable to SPREP under the Executing Entity Agreement (EEA) as well as the Director General of the Ministry of Climate Change) and the SPREP PMU is directly managed by the Director of the Climate Change Division of SPREP (now the Climate Change Resilience Programme). The overall institutional / implementation arrangements (as laid out in the original proposal document) are outlined in Figure 1 below:

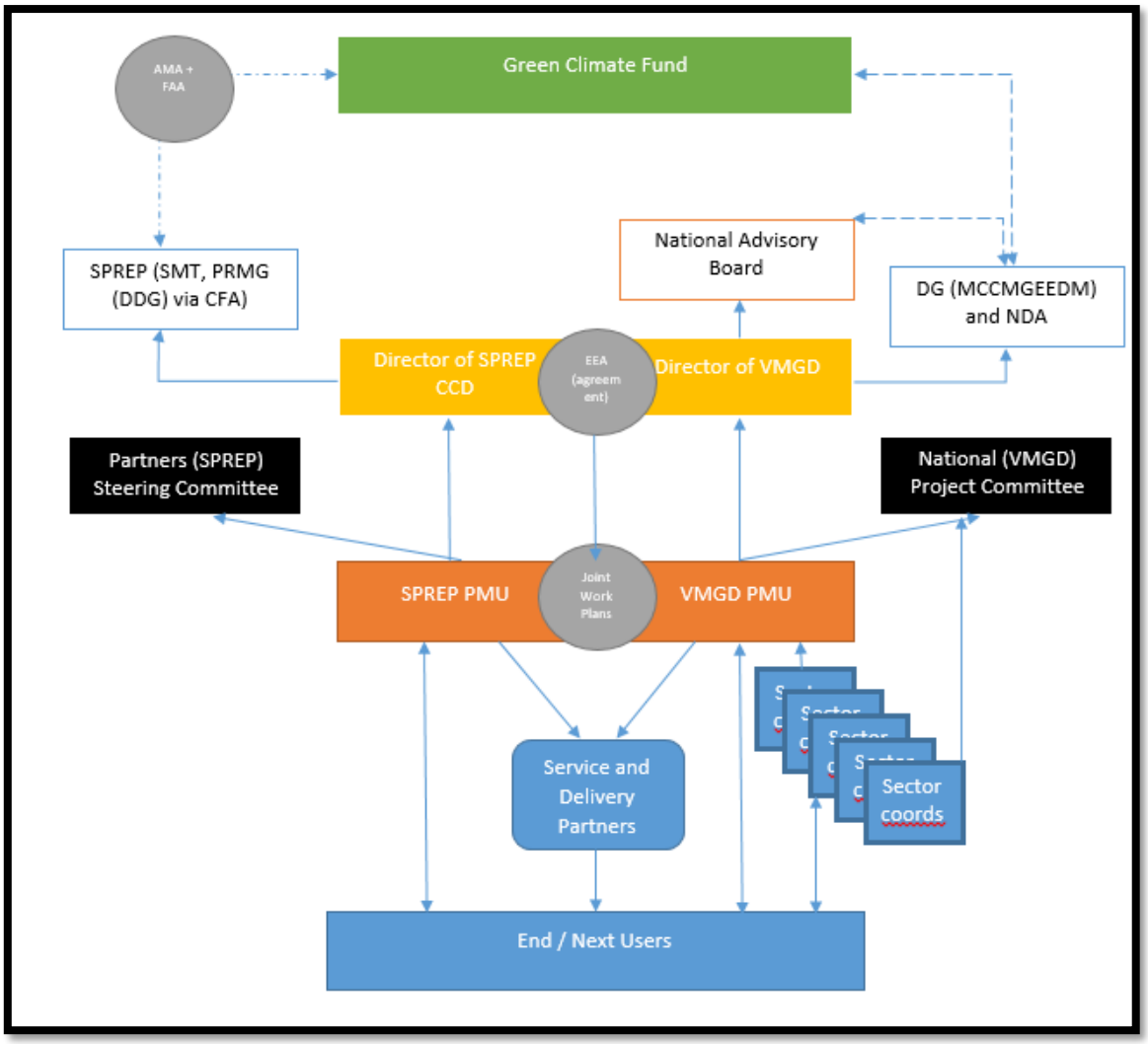


Figure 1: Implementation arrangements and relationships between various project stakeholders

Although the Project was substantially redesigned from the original design (as part of meeting the conditions on the FAA) the PMU arrangements have never been revisited. Having SPREP as both an Implementing Agency and Executing Agency has been a source of ongoing confusion and difficulty. It would have been simpler to have SPREP as IA (whilst retaining a procurement role) and VMGD as the sole EA overseeing a single PMU. This review did not find a single stakeholder who thought having two PMUs was a good idea. There is widespread confusion as to the split of responsibilities between the PMUs. The two PMUs are also located on opposite sides of Port Vila making it difficult to directly access each other and for others to access both PMUs (the VMGD PMU is located in the main VMGD office and the SPREP PMU has an office in the Vanuatu National Provident Fund building).

Many stakeholders had a positive working relationship with the two PMUs and say communication is good. According to one of the delivery partners - *We have good relations with both PMUs and tend to treat them as an integrated unit. Not sure why there are two but would be better if they were integrated*.

Other stakeholders from Vanuatu Government, delivery partners and SPREP all pointed to challenges that were either caused or exacerbated by having two PMUs:

VMGD staff: *The set-up of PMU's should be in one office space: the staff are not clear about these arrangements which causes delays.*

VMGD staff: *Sunny* [SPREP PMU] *is very supportive and has good ideas and always responds- but the problem is Sunny is not in the same office* [as VMGD PMU].

Delivery Partner: *I find two PMUs confusing.*

Delivery Partner: *This project has many Components conducted by so many parties. Some by sector, some by departments, some by PMU, some by SPREP, unless there is cohesive coordination and continuous communication, sectors are not aware of what is going on.*

Delivery Partner: *Also lack of clarity around the two PMU roles. Large documents are updated and circulated but hard to work out what the changes are without comparing the two documents and reading carefully. Need to just highlight changes, executive summary etc.*

VMGD Staff: *Sunny should be close to VMGD team given his technical skills. Sunny is now the acting manager instead. The team need him at VMGD. Two PMUs in Vanuatu is unnecessary. Should be one PMU in one office space. It would be great to have Sunny physically at VMGD PMU to provide technical support to the staff.*

SPREP (EE): *Best if all were in the same place, some capacity issues at VMGD side, that's when SPREP could join in and support the PMU.*

There have been ongoing discussions between SPREP and VMGD about merging the two PMUs but at this point it has not been enacted. The SPREP PMU Project Manager left in July 2019 and the Climate Services Technical Advisor has been acting PM since that time. This does not allow him to focus fully on his technical advisory role.

It would be more effective and efficient if the two PMUs were to merge and be located together in the VMGD building. The SPREP PMU Climate Services Technical Advisor should assume that same role within the VMGD PMU. He should continue to report to the SPREP Climate Resilience Unit but also have a direct line of reporting to the VMGD. This has already been happening in practice with the current VMGD Director (since January 2021) having regular weekly reporting and meetings with the two PMU managers to update him on progress and challenges.

There is also a recognition across stakeholders that there are challenges in the area of project management capacity within the VMGD PMU. SPREP and the Director General of MCC and Director of VMGD have been in discussions regarding hiring a project management technical advisor. There is a strong need to ensure sector plans and delivery partner inputs are well aligned and coordinated, as well as other project management inputs around community climate centres. The proposed PM advisor position should go ahead to support this process as well as other project management needs. The PM TA should be located within the VMGD PMU and have joint reporting to SPREP and VMGD (similar to the Climate Services Technical Advisor). This would allow the head of the VMGD PMU to take more of a coordination role.

Other areas that a redesigned single PMU need to focus on include:

Monitoring and Evaluation: There is currently an M&E framework under development with support from GCF's IEU. This should be finalised and then implemented in Vanuatu by the PMU with the support of the Project Management Advisor (to be hired) and possibly and M&E Consultant.

Project Documentation: With a dispersed number of project stakeholders and implementers there is a risk of documentation getting missed or duplicated. Version control of live documents was mentioned as a challenge by a few stakeholders with inputs provided on one version and then an earlier version being returned without the inputs. Drobox appears to be used for particular events but could also be used (or some other file sharing platform) as a central project documentation collaboration area.

Project Communication: The dispersed nature of activities and stakeholders also makes it difficult for stakeholders to be aware of the progress of activities going on within the project. This is exacerbated by ongoing COVID travel restrictions. A simple monthly or quarterly

newsletter advising of what activities were carried out in the previous month/quarter and what activities are planned in the coming month/quarter would allow project stakeholders (in Vanuatu and outside) to have a better idea of the project as a whole. This could be in a more informal format than project reporting and could part of the PMU's coordination role. This newsletter could be the responsibility of the Communications Coordinator.

2.3.3 Effectiveness of Partnership arrangements

VMGD and SPREP CCR have a good working relationship that could be further harmonised through the merging of PMUs as outlined previously. This would also facilitate a more streamlined and effective relationship with the delivery partners as well as the target sectors.

The project is still at an early stage at developing its community engagement processes and this has been discussed in the previous section. As discussed previously, developing links with existing community networks such as weather women and VCAN would enhance beneficiary impact.

The long delays in GCF disbursements have been challenging and frustrating, particularly for the executing entity (VMGD), and this has impacted on the relationship between VMGD and the Implementing Entity (SPREP). Senior VMGD staff are not clear on whether conditions are imposed by GCF or SPREP and this contributes to a lack of trust. If it was possibly for a senior VMGD staff member to participate in some of the meetings with GCF it may go some way towards improving relations.

The operations of Project Steering Committee (PSC) and Technical Working Group (TWG) have not been contributing to the effectiveness and efficiency of the project as well as they could have. PSC and TWG haven't met frequently and are therefore not used optimally. The review team is aware that the TWG and PSC only gathered once before April 2021 (the review team is aware of the second gathering during the MTR assignment in June 2021). It is likely that this is caused by the restructuring of the project and design gaps, which have led to different speeds in originally planned delivery and workplans. Since the project has been responding to changes constantly, it has not managed to develop routines around regular TWG and PSC meetings, and organisational structure at all levels, supporting the technical delivery. However, based on the stakeholder feedback, the project efficiency would have benefitted from more regular PSC and TWG meetings, which would have provided some clarity on the technical work between delivery partners, the synergies between these works, and helped to avoid misunderstandings in some project management and administration processes that were brought up in the stakeholder interviews. Better results could have been achieved by having quarterly TWG meetings, providing a platform for the stakeholders to discuss and understand better the synergies between their activities.

Knowledge management and communication to all stakeholders worked well at times, usually between the most direct contacts. However, the organisational structure creates inefficiencies (as discussed previously) and the communication issues between PMU, PCU, GCF and sectors are an indicator of bigger management challenges. There is a risk of current form of project coordination leading to disconnected implementation, which doesn't drive efficiently towards the project goal, and there will be many lost opportunities to increase the overall effectivity of the project. The project redesign has helped this but how it has been integrated by different sectors and different project stakeholders seems to be inconsistent.

2.4 Efficiency

This section describes the overarching factors impacting the efficiency of Van-KIRAP Project so far. Overall, the project has suffered from inefficiency from the beginning, which is underpinned by the limitations of the original project design which was approved with huge gaps in it, as well as disbursement delays which have led to changing workplans and project management processes. These have been compounded by external factors such as COVID-19 and TC Harold. The greatest efficiencies were achieved in delivery partners performance, who due to long experience and high-capacity were able to adjust their workplans in a very

agile way to achieve as much as possible with the limitations. It is expected that with the project redesign and slowly opening travel restrictions further efficiencies could be achieved.

2.4.1 Overview of section and outcomes

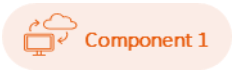
One of the significant challenges in the project are the large gaps in the original project design which was approved by the GCF. Based on the received stakeholder feedback and document review, there were several gaps in the original project design in terms of project objectives, budget, results framework and feasible workplan. To address these gaps, the GCF signed the contract with the previously discussed 20 FAA conditions which needed to be met in order to effectively start the implementation activities. This led to delays and inefficiencies in kickstarting the project. Consequently, the project implementation time and funds have been used to fill these gaps.

Despite the gaps in the project design, the majority of the Van-KIRAP staff were employed in 2017 – 2018. However, due to challenges around meeting the GCF FAA conditions and consequent delays in fund disbursements, the actual project delivery was not able to commence until much later. Therefore, the project funds were not efficiently used to deliver the project, instead a majority of the staff time was used to design project activities, including revision of workplans and budgets. Since large parts of the roles of the project staff needed to focus on carrying out project design instead of implementation, the skillset needed for these activities was not considered well in the job descriptions. This all contributed to inefficiencies in the project activities and led to resignations of some key project staff. Due to the complicated start of the project and need for further design the project, several informants expressed the need for additional capacity in project management at all project stakeholder levels.

In addition to COVID-19 (discussed later in this section), another external factor impacting the efficient delivery of the project was the occurrence of TC Harold in April 2020, which caused widespread damage in Vanuatu. This occupied VMGD staff for several weeks and damaged some procured equipment and shifted the sector's focus onto disaster recovery work. Therefore, this impacted the delivery efficiency in 2020, although based on the feedback, the impact of it was not comparable to the other hindering factors discussed in this section.

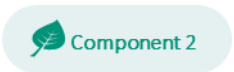
2.4.2 Efficiency of output delivery

Component 1: Strengthening CIS for Vanuatu Government decision-making



Partly due to the delays in meeting the contractual conditions and changes in these requirements, there have been long delays in the fund disbursements, which have impacted all the project stakeholders and negatively contributed to the delivery efficiency. For example, this has impacted the procurement of the bulk of the technical equipment needed to achieve targets under Output 1.1 and 1.2. Based on the informant feedback, overall, the process to release funds was not well understood among all the stakeholders due to the changing requirements and processes. It was noted by several informants, that the disbursement delays severely impact efficient project implementation. In addition, the delivery partners had experienced issues with the disbursements, and it had delayed a lot of their activities. However, due to the long experience of these organisations, they all had managed to make some progress under the current circumstances.

Component 2: Demonstrating the value of CIS at the sectoral and community levels

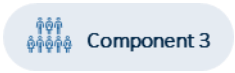


Issues around data sharing and access have impacted the efficiency of several project activities carried out by the delivery partners, in particular at sectoral and community levels. Several delivery partners expressed it has been challenging to access some VMGD data remotely, despite having signed data sharing agreements in place. This has negatively impacted the work of some of the partners. The reasons behind the issues were explained to be ICT related, but there was no clear plan in place how to fix the issue.

Furthermore, the remote nature of the work from March 2020 onwards has hindered the efficiency of the work delivery partners have been able to do with the sectors. The lack of informal interactions and face-to-face capacity building as part of the case study planning has led to delays in approving the workplans for sectors. This combined with disbursement delays and project restructuring has negatively impacted project implementation.

Community outreach has been limited so far, mainly around introducing the concept through sector coordinators, and workshops with the delivery partners. According to the Annual Report 2020: This activity has been delayed whilst the conditions of the FAA have been met. With the recent approval by the GCF, recruitment for a long-term, local communications specialist commenced with an expected start date later in 2021. The appointment should help facilitate the implementation of actions under this activity.

Component 3: Development of climate information tools and engaging with stakeholders through outreach and communications



The TK Strategy has been finalised in 2021. Integrating this knowledge into the CIS tools has been in early steps, apart from the agriculture sector which has proactively integrated TK into the development of CIS tools. It appeared these processes had been occurring in parallel without knowing of each other's effort, but recently the two parties have communicated more and ensured the approaches are aligning and as per the TK Strategy. The TK Strategy is the foundation for the Output 3.1, and therefore greater efficiency can be achieved now once the milestone has been approved. There had been some inefficiencies in the process due to the staff changes within BOM, changing workplan and disbursement issues, but it is expected that greater efficiency under Output 3.1 will be achieved.

Due to the travel restrictions, much of the CIS tools that have been developed are still depending on ground truthing to be possible in the near future. For instance, BOM is developing seasonal climate forecast product, which needs to be ground-truthed. Therefore, the efficiency has suffered from both COVID-19 and the lack of coordination between technical delivery of different project stakeholders. Therefore, the Output 3.2 has suffered inefficiencies mainly due to the lack of finalisation of the CIS tools, and slowness of finalising and approving sector workplans.

Component 4: Strengthening the institutional capacity for long-term implementation of CIS in decision-making



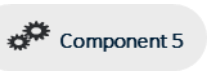
As discussed above, the global **pandemic COVID-19** has negatively impacted the delivery efficiency largely due to the travel restrictions. These restrictions have caused much of the activities to be modified into remote delivery format. This has particularly impacted the work of the delivery partners and their capacity building and training activities. It was noted by several informants that the remote trainings around data and information management have not been as effective as they could have been face-to-face. Particularly, it was experienced that the quality control and homogenisation techniques are not fully understood and internalised by the VMGD team. *"This topic would really need face-to-face training, which hasn't been possible due to the travel restrictions."* However, whereas the remote training impacted the effectiveness and efficiency negatively, it also increased the efficiency in terms of the time spent on delivering the training, and by increasing the accessibility of the training to a larger audience. Some trainings allowed much larger participation numbers, which some delivery partners considered to be a strength. Furthermore, it was noted by several informants that some remote trainings have been rather efficient and effective, in particular when it was directly building on the stakeholders' existing skills, instead of introducing fully new processes and technologies.

The gender and social inclusion plan is nearly completed, but there are major concerns about both the effectiveness and efficiency of implementing this plan. Due to starting this activity after the sector workplans and project activities have been nearly developed and many of

them already commenced, it is challenging to efficiently mainstream social inclusion into these processes and systems.

The lack of an M&E plan impacts the efficiency of monitoring the project progress, which impacts in turn the project management (Component 5). Evaluating the efficiency of the processes is a challenge without clearly tracked processes and achievements. These results could also be used as further proof for the GCF about the impact of the external delays, and for the internal stakeholders as an evidence of the root of the problems and the diversity in them. Although it was stated by many participants that the key issue is the delays in funds disbursement, these is strong evidence that many other issues have also impacted the slowness of the delivery. An appropriate M&E plan, updated based on quality data and information, would enhance the efficiency of the delivery by underlining which are the pending matters and which of these matters are the responsibility of which stakeholder.

Component 5 Project management efficiency



To achieve better delivery efficiency and effectiveness, the project experienced a large redesign in 2019, meaning the implementation was put on hold and the project framework was reorganised to create clearer structure and better efficiencies around the delivery. Although in the longer term the restructuring is expected to increase the delivery efficiency of the project, it temporarily froze a majority of the activities and forced the project stakeholders to revise their workplans frequently. Although it was expressed by several stakeholders that the goal of the overall project remains unclear, all in all the restructuring was seen to have improved the project's results framework, providing some clarity on its objectives and direction.

As discussed before, the original project administration structure included two executing entities, and two PMUs. One of the matters that was shared by all the stakeholders and informants was the inefficiencies around the establishment and use of these two PMUs in the project and activity coordination. "*The current structures of the two EEs, two PMUs, is making managing the project very difficult. Best if all were in the same place/ There are some capacity issues at VMGD side and that's when SPREP could join in and support the PMU with their expertise."* Also, the PMUs' role was often mixed with the SPREP PCU's responsibilities. Questions were raised around potential lack of trust and speculation whether this was caused by the complicated project management structure, and unclear division of roles between the several coordination bodies. However, it was noted by several informants that this has become clearer after the restructuring of the project, and there was positivity around the future increased efficiency.

2.5 Sustainability and Impact

As discussed above, several challenges have impacted the project delivery, and therefore the impact to be measured at outcome level is limited. Overall, the impact on the communities has been minimal at this stage of the project as activities have not yet got down to the community level. Hence, the discussion in this section is focused on the sustainability of the impact at output level, with focus on identifying overarching factors which either contribute or pose risk to the sustainability of the activities. Overall, the sustainability of the project is not yet ensured and is heavily dependent on completion of many of the activities, and the success in securing funding for the O&M.

The below discussion links strongly to the matters discussed in the previous sections of the Findings chapter (*relevance, effectiveness and efficiency*) and should not be interpreted without the challenges presented in the other sections.

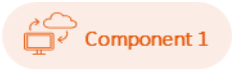
2.5.1 Overview of section and outcomes

There was strong evidence in the original project proposal about good consideration of sustainability of the project outcomes. This included the aim to embed the sector coordinators in relevant sector agencies to assist with the development and application of CIS in key sector

policy, planning and project processes. Also, the establishment of climate change community centres was considered to increase the sustainability by creating a focal point and infrastructure for dissemination of the information at provincial level and Area Council level beyond the life of the project. Furthermore, the supervision and support of technical activities under Components 1 and 2 provided by the delivery partners was considered to increase the capacity at VMGD and create sustainable impact through improved knowledge and skills. In addition, the original project proposal underlined the importance of open-sourced data to increase accessibility, and the need for regular funding to maintain the operations under each project Component. However, due to the much changing workplans and challenges in overall delivery, it was shared by several stakeholders that the sustainability has not been the focus of the project delivery. For example, no direct actions have been taken to ensure the continuity of the key roles at sector level or embedding the activities into the departments' workplans. There was indication of some early discussions on how to integrate the needed responsibilities into the annual work plans and budgets of different government departments, but no commitments could be confirmed at this early stage of the project.

2.5.2 Sustainability of output delivery

Component 1: Strengthening CIS for Vanuatu Government decision-making



This output has been considered one of the most successful parts of the project, and the digitised and cleaned database will have positive impact on the future research around climate in Vanuatu. It has also contributed more directly into the sustainability– as a result of Van-KIRAP Project activities under Output 1.1, VMGD is considering using the concept of bringing intern climatologists in the team to carry out some of the data digitisation in the longer term. This built capacity can then be used in VMGD through employing these experts in the VMGD team, which will create sustainability around maintaining the skills in the team and continuing to improve the data records. However, unless the climatologist roles are built into VMGD's annual budget and the job descriptions tailored in a way to ensure the continuity of CIS strengthening, the sustainability will not be ensured. This considers the sectors and climate centre staff and expertise too (*see Component 2 for more discussion*).

The climate portal developed under Van-KIRAP builds on the previous work of the PACCSAP project, rebooting the existing work and benefitting from those learnings. It is intended to be complementary to the existing portals managed by VMGD and NAM. The aim is to harmonise the sites and avoid duplication. This approach will lead to greater impact and will be more sustainable due to its linkage to existing systems. Furthermore, trainings modules are planned to be made available for beginner, intermediate and advanced users. However, to ensure the sustainability, these operations need to be integrated into the departments' workplans and individual position descriptions.

The procurement of various weather and ocean monitoring equipment, including a Doppler Radar, presents a significant challenge of ensuring sustainability. So far only Automatic Weather stations have been purchased and the lack of capacity to repair these was discussed earlier. This points to a broader need to ensure that both the technical and financial capacity is in place to sustainably operate and maintain this equipment beyond the life of the project. However, the Doppler Radar represents a particular challenge. O&M of the technology is expensive, and this expertise does not exist in Vanuatu at the moment. Moreover, only few countries in the Pacific Region have the capability for the maintenance. Both budget and capacity will need to be ensured in the country to sustain the radar for its full lifetime. The GCF budget has allocated USD 20,000 per annum for O&M of the radar but the externally conducted CBA identified that O&M is typically in the range of 5-10% of the purchase cost on an annualised basis over the life of the equipment (up to 20 years). This would equate to something more like USD 100,000+ per annum so the amount allocated in the budget may have confused the issue and this will need to be clarified and addressed.

Data storage and accessibility also poses a risk for the sustainability of the project impact. At this early stage of the project, it remains unclear to the majority of the stakeholders how the data will be stored after the project ends, and who will be responsible for updating it and maintaining and funding the operations of the provided equipment. It was understood that the majority of the data is now centralised to VMGD, but sectors have limited accessibility to this data. There is a lot of data gathered in different tools and by different organisations under Van-KIRAP, but how to access it and what happens to it in future is not well planned at this stage, or clearly communicated to the sectors. Ensuring ongoing data security and access will need to be addressed.

Component 2: Demonstrating the value of CIS at the sectoral and community levels

Component 2

Regardless the lack of clearly identified actions, the integration of sustainability factors into the project concept itself had positively contributed to the sustainability of the impact. For example, there were a lot of positive feedback from the sector coordinators regarding the relevance of the received CIS trainings and how it has been helpful already in terms of ensuring the sustainability. For instance, in the tourism sector, the trainings had contributed in the discussions around the ongoing tourism sector legislation review, and climate change and CIS is also going to be integrated in the tourism operators accreditation system which is under development. Therefore, the built capacity under Van-KIRAP has been contributing to this work and sustainability of CIS integration into the tourism sector. This view was also shared by several delivery partner representatives - involving the sectors into their work early on increased the impact and the chances of sustainability of the actions. However, it was noted that the success will only be partial unless the learnt skills are utilised in practice through case studies: "*Otherwise the impact will be limited and sustainability of that built capacity will not be effective. Therefore, important to confirm the sectoral case studies and efficiently start to apply the learnt skills in that context, with the technical support available from the delivery partners during the project lifetime."*

Also, the lack of mainstreaming gender and social inclusivity into the sector workplan leads to significant challenges in the sustainability of Component 2. This is further discussed under Component 3.

It also is unclear how the data will be communicated and transferred to the Climate Centres. This will need to occur by using existing systems as much as possible. For instance, in the fisheries sector (Component 2), the information regarding weather forecasts provided to the communities is considered too technical, and the use of English language was not considered suitable for the communities: "*The scientific terms has no Bislama terms, makes it hard for communities to understand. However, in each local dialect, there are words, phrases that can be used to interpret the scientific language. A need to use these phrases/words to explain scientific information produced by the department of Meteorology to inform people."*

The sustainability of the Climate Centres will not be ensured unless their operational processes, purpose and responsibility is clarified and allocated. Based on some received feedback, there is evidence that the DLA is willing to build the climate centre operations into their business plans, which will also contribute to the sustainability if successful: "*We try to work with DLA, so when the project ends, local authority will be able to sustain and take the responsibility".* It is also important to work with the INGOs and acknowledge their ongoing work and networks at provincial and community level. Their networks will be beneficial in supporting the sustainability of community networks.

Component 3: Development of climate information tools and engaging with stakeholders through outreach and communications

Component 3

Community outreach has been limited so far, mainly around introducing the concept through sector coordinators, and workshops with the delivery partners. According to the Annual Report 2020: *This activity has been delayed whilst the conditions of the FAA have been met. With the*

recent approval by the GCF, recruitment for a long-term, local communications specialist commenced with an expected start date later in 2021. The appointment should initiate the full implementation of actions under this activity.

However, a great risk for the sustainability and impact of the project is the lack of mainstreaming inclusivity in the sector workplan and overall project activities (*also Component 2*). The GAP had been developed after the sector workplans and case studies have been almost finalised, making it challenging to mainstream these considerations into the project. The project impact can only remain sustainable if they serve the needs of the whole community and are understood by all the members if it. *"The more inclusive it is, the more sustainable it is."*

The integration of TK into the project concept has received positive feedback from the communities, and will consequently, positively contribute to the sustainability due to the increased interest towards CIS. On a further note on TK, it was highlighted that due to the relationships that were built through CoSPACC[3] project team, including collaboration with cultural centres and field offices at provincial level, there is a good chance of the impact lasting beyond the project lifetime: *"If they keep sector and those relationships working, you can get those partnerships happening beyond the project. You have somebody in the field who can help with the communication."*

Regarding the development of CIS tools under Component 3, it was highlighted that the success and sustainability of those depends on updating the tools and maintaining the knowledge base around them. Also, the accessibility to these tools needs to be ensured, and be inclusive.

Component 4: Strengthening the institutional capacity for long-term implementation of CIS in decision-making

Component 4

According to the project proposal, the original plan was *"In relation to new infrastructure, procurement, installation and maintenance will be incorporated into the existing infrastructure management, planning, procurement and maintenance arrangements for the VMGD according to existing Vanuatu Government standard operating procedures and protocols. These arrangements will include during and post-project arrangements to ensure ongoing sustainability.[4]"* Regardless of the good original considerations around sustainability, there have been gaps in actual arrangements to support these aims. For instance, the responsibilities around the technology and device O&M need to be clarified and built into annual budgets and responsible staff members' job descriptions, who also have the required technical skills. This needs to be supported by appropriate training. For instance, AWS sensors are currently malfunctioning after only few months of successful operations, and there is no capacity in the country to fix these. Furthermore, it was pointed out by a number of key informants that there needs to be careful considerations regarding the case study activities and location of procured technology, and this hasn't been seen to be part of the assessment processes as strongly as it should. The logistics are expensive and these need to be factored in the annual budgets.

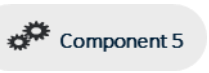
In order to achieve sustainability under Component 1 and 2, the VMGD staff's and sector's research skills need to be built so the use of the climate information can be effectively applied and used in the country. "*We should build research capacity, then start to utilise all the data and make proposals on which the policy makers can base decisions on."* It will also be important to maintain the training and skills gained under Van-KIRAP. For instance, some of the built capacity will help VMGD in their data records cleaning in the long-term, but without making this training and skills transferable and as part of the requirements of the climatologist role, it will be challenging to maintain it. In addition, the ongoing staff turnover among

[3] https://www.pacificmet.net/project/climate-and-ocean-support-program-pacific-cosppac
[4] The Original Project Proposal, 2015.

government staff highlights the need for continuous training and access to training material and modules.

The remote delivery of the work by the delivery partners also risks achieving the highest possible impact and sustainability of the outputs unless the delivery partners manage to get to the field during the next year to build the capacity around the developed services / software etc. For instance, agriculture sector needs to carry out ground truthing and capacity building in the field to strengthen the case studies. Without the strengthened institutions and staff capacity, the results will not be able to achieve high sustainability and greater impact (Output 4.1 and 4.2). The skills and capacity building would largely benefit from face-to-face trainings, which would also contribute to larger impact and sustainability. The current travel restrictions are making this aspect challenging.

Component 5 Sustainability and Impact of the Project Management



One of the contributing factors towards overall sustainability is that the PMU has been under VMGD, which has allowed them to take responsibility and ownership over the project. However, the several gaps in the project management (*discussed before in this report*) and the existence of two PMUs have not been helpful for the project sustainability since the responsibilities have been split across different teams, which has led to inefficiencies and a lack of clarity of roles.

The major issue around the sustainability of Van-KIRAP is the lack of an exit plan which is tailored and updated based on the project direction and emerging needs. The plan should be developed over the project lifetime and integrated with the monitoring and evaluation plan that is under development.

3 Conclusion and Lessons Learnt

The Van-KIRAP Project has suffered from ongoing delays due to required restructuring of the project to meet FAA conditions. This has resulted in delays to funding disbursements and disruptions to the implementation of activities. Staff turnover during this period has also impacted on a lack of continuity and cohesiveness to project Components. This was compounded by the impact of COVID-19 and TC Harold. At this stage of the project, it is difficult to measure any impact on beneficiaries but there are opportunities for the project to achieve its outcomes and ensure there are positive impacts on sectors and communities. If the project can be successfully implemented, it can provide an invaluable resource that can enhance the impact of other projects working towards climate resilient development.

The Van-KIRAP Project in its original design did not clearly develop clear pathways to ensure CIS reached target sectors and beneficiaries. The project was reviewed and redesigned in 2019 and is now more relevant to the priorities and needs of target beneficiaries (sectors and communities). Despite the delays, there has been some progress in the delivery of Component 1 outputs and to a lesser extent Component 2. Development of sector case studies under Component Two has been slow and inconsistent. Components 3 and 4 have had limited delivery.

The current project timeframe has a conclusion date of January 2022 but a request for extension is expected to extend this to December 2023. This will be essential to have a chance of completing project Components and achieving impact. In particular, to ensure the delivery of Component 2 sector coordinators will need to be supported to have their case study plans fully developed to enable delivery partners to “road test” CIS in sector case studies then get feedback from the sectors. This is particularly important in relation to CSIRO who will not be able to continue engaging with the project beyond December 2022.

Processes for coordinating and distributing findings of sector case studies (as well as ensuring broader mechanisms for effective CIS dissemination and use) will need to be robust and well developed for smooth transfer through community climate centres. This should take priority

before the full roll out of all 12 planned community climate centres. Having six functioning provincial level community climate centre, with good processes of CIS dissemination and linkages to beneficiaries, will be a better outcome than 12 community climate centres with less well-developed linkages.

The project has involved a broad range of government stakeholders with an interest in CIS in Vanuatu. As the project moves into the community level it will be important to draw more widely on existing networks such as community disaster management structures coordinated by the NDMO as well as other civil society networks representing women (eg. Women's weather network) and people living with a disability. This would enhance the inclusivity of the project activities as well as contributing to impact and sustainability.

The Project formally has two executing entities (SPREP and VMGD) each with their own PMU. This structure is neither effective or efficient and would benefit from a merger. There are also capacity constraints within the PMUs which should be addressed. These include project management technical capacity, monitoring and evaluation technical capacity and communications. These are in various stages of being addressed. The review makes a number of recommendations which are presented below.

The lack of clear exit strategy is a weakness that should be rapidly addressed and linked to the M & E plan which is under development. There should also be a clear plan how to embed the O&M responsibilities in organisations and departments annual plans and budgets.

4 Recommendations

In this section, the recommendations for the future actions have been divided between the project Components. Specific areas have been also allocated for project management and sustainability. The recommendations have been assessed and the priority order have been illustrated next to each recommendation.

4.1 Project Management

Recommendation 1: GCF need to confirm the project extension to December 2023 ASAP. This will give clarity to project staff and allow them to focus on their tasks.



Recommendation 2: Delays in disbursement have been a major disruption to project implementation. The GCF needs to ensure the timely disbursement of scheduled funding once the required documentation submitted by the EE and IA to ensure no further disruptions in project implementation.



Recommendation 3: There are currently two PMUs (one SPREP and one VMGD) located in different parts of Port Vila. This is not conducive to effective and efficient project management. **These two existing PMUs should merge and be located at VMGD premises**. There is already agreement between SPREP and VMGD on this and it **should be implemented by September 2021**. The current SPREP EE PMU CIS Technical Advisor should take a technical advisory role within the VMGD PMU and focus on supporting the collaboration between delivery partners and sectors, identifying the synergies in technical work and facilitating the collaboration. He would report to both SPREP and VMGD.



Recommendation 4: A project monitoring framework should be finalised by SPREP by September 2021.



Recommendation 5: The recruitment of a project management advisor (as per the TOR developed by SPREP PCU in January 2021) should also be concluded by September 2021 (subject to GCF approving project extension beyond January 2022). The project management advisor would support the PMU as well as the sectors in developing and implementing work plans. This individual should also have a good understanding of M&E and ensure project plans are aligned with the project monitoring framework once this is finalised. This position would also report to both SPREP and VMGD.



Recommendation 6: The VMGD PMU should establish a document sharing platform, for instance through Dropbox, which access should be shared with all project stakeholders. The key project documents and updates should be kept in the assigned folders, including any training material. Also, clear guidelines in document sharing and naming should be developed through the platform, ensuring avoidance of duplication of efforts around project documentation and version control. This should be in place by September 2021.



Recommendation 7: The SPREP PCU should discuss with the GCF (by September 2021) to include the VMGD PMU (including VMGD Director) in specific joint meetings. This would increase the transparency and minimise some misunderstandings and doubts that have arisen through possible miscommunications.



Recommendation 8: The Communications Coordinator to organise a monthly or quarterly newsletter on project activities conducted in the previous period (month/quarter) and activities planned in the coming period (month/quarter). This should be in a less formal “newsy” format that helps in keeping internal project stakeholders up to date on the range of project activities. This should start within one month of the Communications Advisor commencing employment.



Recommendation 9: VMGD PMU should have a gender and inclusion focal point as part of their team, who would be trained to work with the sectors and community climate centres to ensure mainstreaming inclusion into the operations. This should be in place by September 2021.



4.2 Sustainability

Recommendation 10: Training material and training modules, relevant to the key project roles that need to be embedded into VMGD and the sectors, should be in a central repository. The delivery partners could assist developing the materials and modules, and VMGD and SPREP should discuss with the DGs and directors of the key organisations how to ensure the embedding of these into the annual workplans and budgets. This is crucial in terms of ensuring transfer of the skills and sustainability. This should commence immediately and be reviewed by the PMU every three months.



Recommendation 11: The VMGD PMU (supported by a Project Management Advisor) should oversee the development of a Project Exit Strategy. The exit plan should include a clear roadmap how to initiate the process of VMGD and sectors including the funding of the ongoing O&M in their annual plans and budgets. This should be completed by December 2021.



Recommendation 12: Procurement of equipment needs to be underpinned by a well-developed O&M plan by VMGD, including identification and training of relevant VMGD staff (supported by the relevant delivery partners) as well as allocation of sufficient ongoing budget.



Recommendation 13: The GCF budget has allocated USD 20,000 per annum for O&M of the Doppler radar but the externally conducted CBA identified that O&M is typically in the range of 5-10% of the purchase cost on an annualised basis over the life of the equipment (up to 20 years). This would equate to something more like USD 100,000+ so the amount allocated in the budget may have confused the issue and this will need to be clarified and addressed by VMGD. This will be a significant ongoing financial burden on VMGD.



4.3 Component 1

Recommendation 14: The digitised data should be saved in a cloud-based system. This doesn't only decrease the risk of losing data, but also increases its accessibility and sharing. VMGD to discuss with BOM on appropriate cloud-based system. This should be completed by December 2021.



Recommendation 15: Overall, greater access to the gathered data and VMGD databases should be ensured, and appropriate data sharing agreements signed and observed between the different government organisations, provincial actors, delivery partners and NGOs. In case the issue around the current sharing difficulties is ITC related, it needs to be recognised and actions taken to fill any gaps in terms of needed equipment or maintenance. This should be completed by December 2021.



4.4 Component 2

Recommendation 16: The PMU (*merged*) will need to provide additional support to the sector coordinators to ensure their case studies are in a position to maximise the inputs of delivery partners who will most likely be able to travel within 6-12 months. This is particularly important in relation to CSIRO who will need to finish on Van-KIRAP by Dec 2022 even if SPREP get a no cost extension beyond this date. This should be completed by December 2021.



Recommendation 17: VMGD's rollout of community climate centres should initially focus on the provincial level centres, and ensure linkage with sector case studies and well developed CIS dissemination and use strategies, before expanding to Area Council CCCs.



Recommendation 18: Community climate centre linkages should be more strongly embedded within civil society structures and community level networks (Red Cross, Women's Weather Network, disability associations and community structures (CDCCCs). Guidelines should be developed to include this as part of training of climate focal points. This would link with the GAP (and gender focal point) and the TK Strategy. This will help ensure CIS is relevant to the community and accessible to different users including women, youth and people living with a disability. This should include outline of community feedback processes. This should be completed by December 2021.



Recommendation 19: Implementation of community climate centres should also be coordinated with NDMO, to ensure complementarity with NDMO work at PDC, AC and CDCCC levels.



4.5 Component 3

Recommendation 20: VMGD to ensure that processes of integrating TK into CIS is consistent with the TK Strategy. The TK Coordinator should work closely with the Communications Coordinator to develop clear protocols and strategies for integration of TK into CIS at community climate centres. This should be completed by December 2021.



4.6 Component 4

Recommendation 21: The M&E Plans needs to be developed around the revised results framework. The project management advisor should take responsibility for managing the process, but external support should be sought to create tailored plans for the project. It is understood simple templates have been created, but it is important to ensure these are responding to the GCF criteria, and supporting the annual reporting needs of SPREP PCU. This should be completed by December 2021.



Recommendation 22: The Gender Action Plan should also look at how the Community Engagement Strategy and Action Plan could be strengthened from a gender perspective. The VMGD PMU and the Community Coordinator should seek inputs from the Gender Consultant on this process. This should be completed by December 2021.



Appendix 1: List of Stakeholders Consulted

Pakoa Leo	Agriculture Sector Coordinator, Van-KIRAP	Department of Agriculture Van-KIRAP
Jonah Taviti	Water Sector Coordinator, Van-KIRAP	Department of Water Resources, GoV
Nastasha Shing	Fisheries Sector Coordinator, Van-KIRAP	Department of Fisheries Sector, Van-KIRAP
Neil Malosu	Climatologist	Van-KIRAP VMGD
Daphne Nalawas	Climatologist	Van-KIRAP VMGD
Stephen Tom	Climatologist	Van-KIRAP VMGD
Hosea Edson **Christina Talao**	Focal point- Sanma Province Focal point- Sanma Province	Tourism Dept (Sanma Province) Water Dept (Sanma Province)
Florian Lawac	Head of root and tuber crops Department	VARTC
Lilly Fatdal	Head of vegetables and spice Department	VARTC
Anna Bulle or Nikita Regenvanu		Department of Strategic Policy, Planning & Aid Coordination
Kensley Misha	Provincial Disaster Officer	NDMO
Albert Willy	TK Officer	Van-KIRAP VMGD
Allan Rarai	Climate Manager	VMGD EA (previously Acting-Director of VMGD)
Esline Garaebiti	Director General,	Ministry of Climate Change GoV (EA)
Tagaloa Cooper	Director	Climate Change Resilience Programme, (SPREP EA)
Geoff Gooley	Delivery Partner / Project Manager, Van-KIRAP	CSIRO
Arthi Patel	GESI Advisor	Australia Pacific Climate Partnership
Celine Becker	Delivery Partner / CoSPACC	BOM
Sharon Alder	Director of Programs	CARE International
Elizabeth Faerua	Country Director	Oxfam
Vlad Arnaoudov	Worked on the project development and oversaw for first 2 years	GCF
Joseph Intsiful	Senior Task Manager for CIS/EWS	GCF
Moirah Matou	Project Manager	Van-KIRAP VMGD PMU EA
Sunny Seuseu	Acting. Project Manager	Van-KIRAP SPREP PMU EA
Melanie King	Manager (Van-KIRAP Task Manager)	Project Coordination Unit, SPREP Implementing Agency
Vitolina Samu	Project Implementation Support Officer (Van-KIRAP Co Task Manager)	Project Coordination Unit, SPREP IA
Paul Mitchell	Principal Advisor, Climate Change	Save the Children
Lilian Macharia	Director of OPM	GCF
Moses Bani	Tourism Sector Coordinator, Van-KIRAP	Ministry of Tourism, GoV
David Gibson	Community Coordinator	Van-KIRAP contracted by SPREP EA
Dewi Kirono	Project Research Team Leader	CSIRO
Yuriy Kuleshov	Delivery Partner / Science Lead, Van-KIRAP	BOM
Lynda Chambers	Delivery Partner / TK Specialist	BOM
Bo Ra Kim	Delivery Partner / Senior Project Manager, Van-KIRAP	APCC
Jong Ahn Chun	Project Research Lead	APCC
Sascha Fuller	Contracted to develop project Gender Action Plan	University of Newcastle
Miriam Okong'O	Task Manager (since early this year)	GCF
Montin Romone	Director	VMGD EA
Lidvina Karie	Finance Officer	Van-KIRAP VMGD PMU EA
Connie Sewere	Technical Administration & Finance Officer	Van-KIRAP SPREP PMU EA

Appendix 2: List of Documents Reviewed (tbc)

GCF (2021) Vanuatu Country Programme

Gibson, David (2021) Site Visitation, Assessment and Consultation Report *Nakere, Luganville, VARTC, Loh and Sola community climate centres*

Government of Vanuatu (2016) Vanuatu 2030 – The People's Plan: National Sustainable Development Plan 2016 to 2030

VMGD (2018) Radar, Automatic Weather Stations and Other Equipment: Technical Specifications, O&M

VMGD (2021) Community Engagement Strategy and Action Plan 2021

Appendix 3: Summary Table of Progress Against Output Indicators

Output	Indicator	Baseline	Mid-term review target	Mid-Term Review actual	MTR assessment of chance of completion by December 2023
Output 1.1. Strengthening Climate Information Services through data and interfaces	Climate data digitised, homogenised and uploaded into the VMGD portals	Portals established but do not have old data	100% of old data records digitised and uploaded into portals	Good progress. Delayed by late disbursements. Recently purchased scanner which will speed up work.	Likely to be achieved
	VMGD IT platform upgraded	IT platform in place but without hardware and software to support data and portals	Operational ICT system in place to support DSS tools and processes	Platform redesign in progress but not yet operational.	Likely to be achieved
	User interfaces have been strengthened to support CIS decision-making	CLEWS is established however requires new software applications	Software applications modified and operational	BOM completed review of VMGD ICT capabilities.	Likely to be achieved
		No Vanuatu Climate Futures portal in place	Beta version of VCFP IT platform established and under testing	Portal in progress but not yet operational. Delayed due to funding disbursement delay.	Likely to be achieved
Output 1.2. Research, modelling and prediction to support CIS tools and uptake	Three observational networks established and operational	Limited observational networks in sites	Equipment for observational networks procured, installed and transmitting data to VMGD and Sectors	Sites selected and agreements with landowners in progress. Equipment procurement delayed by funding delay.	Can be achieved as long as agreement with landowners finalised and equipment procured. Capacity for O&M will need to be in place to ensure sustainability.
	Seasonal climate forecasts have improved utility and functionality	Limited to no seasonal climate forecasts and products	Methodology and SOPs developed for seasonal impact forecasts for priority sectors	In progress. Requires updated climate data records.	Can be achieved as long as equipment procured. Capacity for O&M will need to be in place to ensure sustainability.

	Long-term projections developed	Limited to no long-term projections available	Modelling framework and downscaled CIS developed	In progress. Requires updated climate data records.	Can be achieved as long as equipment procured. Capacity for O&M will need to be in place to ensure sustainability.
	Risk-based coastal and climate hazard mapping undertaken for Vanuatu	Limited to no hazard maps in use for decision-making	(i) Climate hazard hotspots identified and mapped (ii) Data incorporated into sector case studies	In progress. CSIRO currently conducting modelling and analysis.	Can be achieved as long as equipment procured. Capacity for O&M will need to be in place to ensure sustainability.
	Vulnerability mapping of the coastal zone in Vanuatu completed for target areas	Limited to no hazard maps in use for decision-making	(i) Modelling framework established, and data collected and analysed	In progress. CSIRO currently conducting modelling and analysis.	Can be achieved as long as equipment procured. Capacity for O&M will need to be in place to ensure sustainability.
	Agromet predictions for cropping systems developed	No agromet predictions in place and no tools available	(i) VaCSA prototype installed (ii) Agriculture sector baseline assessment undertaken	Climate risk profile developed. Agromet software prototype (VaCSA) developed by APCC.	Can be achieved as long as equipment procured. Capacity for O&M will need to be in place to ensure sustainability.
Output 2.1. CIS implemented within target sectors	Agricultural practices strengthened through the use of Climate Information Services to improve crop production	Limited to no scope and scale for crop testing against climate impacts	(i) Demonstration sites established for case studies (ii) Climate change projections developed	Three Demonstration sites selected. Two agromet stations installed (one currently not functioning).	Can be achieved but will depend on ability of delivery partners being able to travel to provide in-country support
	Fisheries sector is strengthened through the use of CIS in MPA Management Plans	Limited fisheries plans in place and restricted to specific areas	(i) Draft Management Plans for case study sites (ii) undertaken in at least three communities	4 case study sites selected. Management plans in process.	Can be achieved but will depend on ability of delivery partners being able to travel to provide in-country support
	Vanuatu infrastructure design strengthened utilising climate data in the design and construction phases	No existing software or data to predict flood prone areas, flood levels, high or king tide levels at specific infrastructure sites or locations	For case study sites: (i)Database on bathymetric and topographic data developed (ii) Coastal inundation maps developed	Four case study sites selected. Data collection in process.	Can be achieved but will depend on ability of delivery partners being able to travel to provide in-country support

	Improved water management and security in the Sarakata catchment	No Flood Management Plan or EWS in place	(i) Draft Flood Management & Response Plan developed and/or modified to incorporate CIS input (ii) Integrated Water Management Committee established and operational to facilitate CIS-based decision-making (iii) Operational groundwater model developed and/or adapted for application as part of case study	Still in early stage of establishing stream monitoring. Procurement delayed due to lack of funds.	Can be achieved but will depend on ability of delivery partners being able to travel to provide in-country support
	Tourism sector is utilising Climate Information Services in decision-making	Zero baseline	(i) Standard Operating Procedures for local tourism bungalow design developed and/or modified to incorporate CIS input (ii) Tourism 'hotspots' identified and mapped	Sites selected and surveyed.	Can be achieved but will depend on ability of delivery partners being able to travel to provide in-country support
Output 2.2. CIS is incorporated into community practices	Communities are engaged and utilising CIS at 12 sites	Counterfactual: No communities are engaged through the project No Climate Centres established	(i) 50% (6) of Climate Centres are established and operational	Community Coordinator recruited and community engagement and action plan developed. Potential CCS scoped but none yet operational.	12 centres could be in place but unlikely to be effectively and inclusively utilising CIS at all sites. Recommend focus on getting 6 provincial CCCs established and operational with proven CIS processes in place that are inclusive and networked to the community before expanding further.
Output 2.3. Socio-economic benefit analysis for Vanuatu utilising the customised Pacific CIS cost benefit framework is produced	A SEB on return on investment in Climate Information Services is utilised in decision-making	SEB baseline is counterfactual scenario where CIS is not available and / or is not routinely applied as mainstream evidence-base for decision-making to inform climate action	(i) SEB database established and populated (ii) At least one SEB report produced	Some progress. Delays due to late funding disbursements. SEB database framework in process.	Insufficient information to predict likelihood of completion.

Output 3.1. TK is incorporated into Climate Information Services in Vanuatu	CIS tools and products incorporate TK and climate science and uptake by communities	TK networks established through CoSPACC and some data collected and analysed	(i) TK Strategy implemented and TK data observational network in place. (ii) At least one example of TK data collected and integrated into CIS tools	In Progress. TK Officer recruited and TK Strategy developed and TK data observational network in place.	Can be achieved. Will need to link closely with rollout of CIS through CCCs
Output 3.2. Developing CIS tools and information products for target end-users	Decision support tools are developed and in use by Sectors and communities	No project-developed tools	At least one CIS tool is developed and being tested with Next / end-users as part of each of five sectoral case studies	Still in very early stage. Little progress.	Insufficient information to predict likelihood of completion.
Output 3.3. Implementing knowledge management, engagement and outreach across sectors and communities	CIS tools and information is used to strengthen Sectors and communities to climate change impacts	No Strategy developed and in place. No project-developed tools and information	(i) KM & Communication Strategy developed (ii) At least 10 awareness materials and / or campaigns undertaken	Very limited progress due to disbursement delays. Currently recruiting communications specialist.	Can be achieved if communications specialist recruited soon
Output 4.1. Institutional capacity to implement CIS across sectors strengthened	Sectors are using CIS in their decision-making	Little to no uptake / dissemination of CIS from VMGD to Sectors	At least 25 and up to 50% of recipients perceive benefit from training and utilising it in their workplace	Not formally measured as part of MTR but project documentation and interviews indicate this is in progress but delayed due to late funding disbursements and COVID travel restrictions	
Output 4.2. Training of personnel leads to strengthening of institutional capacity	Capacity and knowledge of climate change and CIS is improved within VMGD and targeted Sectors	Prior training packages have been developed under CoSPACC	At least 25 and up to 50% of recipients perceive benefit from training and utilising it in their workplace	Not formally measured as part of MTR but project documentation and interviews indicate this is in progress but delayed due to late funding disbursements and COVID travel restrictions	

Appendix 4: Terms of Reference

CLIMATE INFORMATION SERVICES FOR RESILIENT DEVELOPMENT IN VANUATU PROJECT

(Project ID: FP035)

MID TERM REVIEW

TERMS OF REFERENCE

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1. Introduction

1.1. Project Background

The Climate Information Services for Resilient Development in Vanuatu (CISRD) or *Vanuatu Klaemet Infomesen blong redy, adapt mo protekt* (Van-KIRAP) Project, is a four and a half year, full size Green Climate Fund project implemented through the Secretariat of the Pacific Environment Programme (SPREP). The Van-KIRAP Project is implemented in the Republic of Vanuatu and managed by the Vanuatu Meteorological and GeoHazards Department (VMGD) and SPREP Climate Change Resilience Programme (SPREP CCR), the Project Executing Agencies, in partnership with multiple partners in Vanuatu, Australia and South Korea.

The Van-KIRAP Project Objective (PO) is to "increase the ability of decision makers, development partners, communities and individuals across five target sectors (agriculture, fisheries, infrastructure, tourism and water) to plan for and respond to the long- and short-term impacts of climate variability and change". The Project is responding to priorities identified in the Vanuatu Framework for Climate Services (2016) and the VMGD Strategic Development Plan 2014–2023, developed through a national consultation and design process.

Climate Information Services (CIS) provides people and organisations with timely, tailored climate-related information and tools that can be used to minimise the impacts of climate variability and change on lives, livelihoods, natural resources, property and infrastructure. CIS supports better policy, planning, and decision-making across sectors, and at national and community scales for both long- and short-term timeframes. Without timely and tailored information about the impacts of climate variability and change, development sectors, governments and communities' risk significant losses and damage from extreme events such as drought, heat waves, cyclones and flooding, and from slow onset changes, such as rising temperatures, sea-level rise and ocean acidification.

The project is building capacity to harness and manage climate data, develop and deliver practical Climate Information Services tools, support the coordination and dissemination of tailored information, enhance CIS related information technology and infrastructure, improve the accessibility of CIS to sectors and communities and support the application of CIS through real-time processes.

This work is achieved through activities delivered under each of the project's four components:

1. **Component 1**: Strengthen the VMGD platform to provide quality climate data and information for CIS (GCF US$9,842,043, co-financing US$1,323,292)
2. **Component 2**: Demonstrating the value of CIS at the sectoral and community levels (GCF US$3,221,530, co-financing US$251,300)
3. **Component 3**: Development of CIS tools and engaging with stakeholders through outreach and communications (GCF US$1,990,655, co-financing US$116,400)
4. **Component 4**: Strengthening the institutional capacity for long-term implementation of CIS in decision-making (GCF US$1,144,407, co-financing US$56,000)
5. **Component 5**: Project Coordination and Management (GCF US$1,908,270)

Van KIRAP is undertaking field work to collect data, develop, test and validate the Project tools and models at sites across the six Provinces: Shefa, Malampa, Penama, Sanma, Tafea and Torba.

1.2. Purpose of the Review

The Mid Term review is commissioned by SPREP as the Implementing Entity within the framework of the Funded Activity Agreement (FAA) between the GCF and SPREP. The purpose of the Mid Term Review is to review and assess the implementation of the Van-KIRAP project since its effectiveness / commencement date – January 10th, 2018. The Project has since undergone amendments in 2019-2020 in response to conditions stipulated in the Funded Activity Agreement. The mid-term review is geared towards promoting project performance improvement, accountability, learning and evidence-based decision making and management. In particular, the review will thoroughly assess Project implementation progress, efficiency and effectiveness, analyse constraints and challenges encountered and develop recommendations to enhance overall performance and implementation effectiveness.

The Mid-term Review will qualitatively and quantitatively review the following elements of Project performance:

1) Overall performance and the likelihood of achieving the PO by project closure.
2) Implementation progress according to the indicators and targets listed in the Results Framework including any underlying causes and issues contributing to targets that are not adequately achieved.
3) Sustainability of the Project's outputs and expected outcomes.
4) Major constraints affecting implementation and identification of viable solutions.
5) Any delays in project implementation, their causes, and draw lessons from the delays and provide recommendations for improved implementation to avoid further delays going forward and to ensure achievement of the project objectives.
6) Project management and effectiveness of the Project Executing Agencies and other institutional implementation units and actors (e.g., Sectors, delivery partners, coordinators).
7) Project supervision and implementation support performance of the Secretariat of the Pacific Regional Environment Programme (SPREP).

The Mid-term Review is intended to identify strengths and weaknesses as well as opportunities and risks of the project and develop recommendations for any necessary changes in the overall design and orientation of the project by evaluating the adequacy and effectiveness of its implementation and delivery of project outputs and outcomes to date. Consequently, the review is also expected to assess the effectiveness of implementation and partnership arrangements and make detailed recommendations for the remaining project period. It will also provide an opportunity to propose any necessary adjustments needed to refocus the project and reorganize the management of the execution of activities.

1.3. Audience for the Review

The audience refers to people or groups of people who are the primary intended users of the findings and will ensure implementation of the necessary changes. The Van-KIRAP mid-term review is initiated by SPREP as the Implementing Entity as per requirements of the Green Climate Fund. The primary audience of the review includes the senior management of SPREP, the Office of Portfolio Management in the Green Climate Fund and senior management for the Executing Entities (Vanuatu Meteorological and GeoHazards Department (VMGD) and SPREP Climate Change Resilience Programme (SPREP CCR)).

1.4. Stakeholders for Review

Stakeholders are individuals, groups, organisations, agencies or entities which have an interest in and / or are likely to be affected by the outcome of the review. The key stakeholders include the implementing entity (SPREP), executing entities (VMGD and SPREP CCR), project delivery partners - CSIRO

(Australia), Bureau of Meteorology (Australia) and the APEC Climate Center (South Korea) - and project beneficiaries i.e. Sectors (water, tourism, agriculture, fisheries and infrastructure) and communities. The project management and implementation teams as well as the Project Steering Committee and Technical Working Group are also a crucial audience.

2. The Scope of the Mid Term Review

The scope of the mid-term review will cover all activities undertaken in the framework of the Project from January 10th, 2018 to April 30th, 2021. It is expected the review will compare planned outputs / outcomes including the advice and proposed amended elements provided by the Implementing Entity, of the Project to actual outputs / outcomes and assess the actual results to determine their contribution to the attainment of the project objectives. The mid-term review will extract lessons learned, diagnose and analyse issues and formulate a concrete and viable set of recommendations. It will evaluate the efficiency of project management undertaken by the Executing Entities and their subsequent Project Management Units (PMU), including the delivery of outputs and activities in terms of quality, quantity, timeliness and cost efficiency. The total amount of funds disbursed to the Project from the Green Climate Fund until February 28th, 2021 is USD 5,083,398.

The review will assess the Van-KIRAP project according to standard evaluation criteria as elaborated below:

Relevance:

- Assess the extent of the contribution of the project towards the achievement of national climate mitigation and adaptation objectives and to the priorities and needs of the target beneficiaries (Sectors and communities) and assess if they are still valid.
- Are the activities and outputs of the project consistent with the overall goal and attainment of its objectives? Analyse whether the Project's Sector and community-based approach addresses the needs and demands of the beneficiaries in a disaggregated manner (for men and women), and the community response.
- Are the activities and outputs of the project consistent with the intended impacts and effects?
- Assess the relevance of the climate information services tools / instruments / inputs applied by the Project to increase the ability of target beneficiaries to plan for and respond to the long- and short-term impacts of climate variability and change.
- Assess the relevance and effect of technical assistance given to VMGD, Sectors and communities.
- Are the interventions doing the right things?

Effectiveness:

- Assess the extent that expected outcomes and objectives of the project are likely to be achieved?
- Review whether the project has accomplished its outputs or progress towards achieving outcomes. In particular, the mission should review factors influencing achievement or non-achievement of the objectives, specifically
    - How the design or planned interventions fit the needs of the Sectors.
    - Site selection criteria and implementation of activities.
    - Targeting strategy for the identification of project beneficiaries including both men and women.
    - Any emerging effect (positive and negative) of the project on beneficiaries including both men and women.

- Assess the performance of the project so far with particular reference to qualitative and quantitative achievements of outputs and targets as defined in the project documents and workplans and with reference to the project baseline.
- Assess the effectiveness of the project management arrangements within the Executing Entities, including the performance of the PMUs and associated staff / consultants and Sector Coordinators.
- Assess the effectiveness of the partnership arrangements outlined below. This will include assessing the complementarity, harmonization and co-ordination with others, and the extent to which the interventions by the partners are adding value whilst avoiding duplication of effort.
    - Between the two Executing Entities - VMGD and SPREP CCR
    - Between VMGD, SPREP CCR and the Delivery Partners (CSIRO, BOM, APCC)
    - Between the Project and beneficiary communities
    - Between VMGD and the target Sectors (agriculture, fisheries, water, infrastructure, tourism)
    - Between the Project and on-ground networks
- To what extent has the project adapted to changing external conditions?
- Based on the progress so far provide recommendations to the above partnership arrangements.

Efficiency:

- Assess whether the project has utilised project funding as per the agreed workplan and budgets to achieve the projected targets.
- Analyse the role of the Project Steering Committee (PSC) and Technical Working Group (TWG) and whether these forums are optimally being used for decision making.
- 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.
- Assess whether the project was implemented in the most efficient way compared to alternatives.
- Identify factors and constraints on how the implemented activities affected the cost-efficiency of the project implementation including technical, managerial, organisational, institutional and socio-economic policy issues including other external factors unforeseen during the project design.

Sustainability and Impact:

- Assess preliminary indications of the degree to which the project results are likely to be continued beyond the project's lifetime (both at the government and community level) and provide recommendations for strengthening sustainability.
- Assess the key factors which influenced the achievement or non-achievement of the sustainability of the project interventions in terms of their (i) effect on the communities and Sectors, (ii) emerging impact on the communities for both men and women in terms of the GCF fund level indicators, and (iii) against the WMO Global Framework for Climate Services (GFCS) as outlined in the Project's logframe / Results framework.
- Assess the difference that the activity made to the beneficiaries of the project. Provide an estimate as to how many people have benefitted this project.

Networks and Linkages:

- Evaluate the level, degree and representation by the beneficiaries and stakeholders in the implementation of the project.
- Examine the integration of the various project team members to work complementary to each other and ensure the linkages between the various outputs and activities.

- Assess the alignment of the project with Vanuatu's strategies and plans (e.g. national development strategy, climate change strategy, Sector strategies and plans), identifying linkages and opportunities for achievement of objectives / targets.
- Assess the project's knowledge management strategy and outreach and communications to all stakeholders.

Lessons learnt / Conclusions:

- Analyse areas for improved project planning, especially with respect to settling activities, delivery of activities, targets, relevance and capacity of institutions for project decision making and delivery.
- Identify significant lessons or conclusions which can be drawn from the project in terms of effectiveness (relevance and potential impact), efficiency, sustainability and networking. Special attention may be given to the coping strategies developed by the project to maintain work momentum.

The MTR mission team is expected to review the following aspects of the Van-KIRAP project:

2.1. Project design

- Assess the value added of the project design approach
- Review the problems addressed by the Project, the underlying assumptions and the effect on achieving the project results as outlined in the project document;
- Appropriateness of the design to the current economic, institutional and environmental situation;
- Is the level of interaction and co-operation amongst the executing / delivery partners effective? Do the executing / delivery partners recognize themselves as active partners in a joint initiative? Do the partners take advantage of their individual capacities to reach optimized results?
- Review the project theory of change and determine if it provides the most effective route towards expected results;
- Relevance of the project to local climate information needs and priorities;
- Assess extent to which relevant gender issues and environmental and social safeguards were integrated in the project design;
- Results framework analysis:
    - Assess the project objectives, outcomes, indicators and targets and determine whether they are clear, practical, and feasible within the project time frame;
    - Undertake a critical analysis of the project's results, indicators and targets and determine if there are any specific revisions required for the remaining period;
    - Assess the development of the gender aspects of the project and if they are being monitored effectively.
- Sustainability considerations in project design;
- Recommend areas for improvement in the design of the project.

2.2. Project Implementation

- Implementation strategy: examine if, how and why the strategies contribute to the achievement of the expected project results chain;
- General implementation and management of Project components in terms of quality of inputs and activities, adherence to work plans and budgets, major factors which have facilitated or impeded the progress of the project implementation;
- A review of Project performance in relation to the indicators, assumptions and risks specified in the project documents;

- Review of the compliance to the legal Agreements and the various other implementing agreements signed in respect of the implementation of the project;
- Adequacy of management arrangements as well as monitoring and backstopping support to the project by all parties concerned;
- Assessment of the capacity, cooperation and performance project executing / delivery partners (SPREP CCR, VMGD, Sectors, CSIRO, BOM and APCC);
- An assessment of the functionality of the project Steering Committee and Technical Working Group;
- Review of project coordination and management arrangements including the effectiveness of monitoring and evaluation mechanisms, financial management; partnership strategy, risk identification and management system and communication.

2.3. Project progress in relation to Outputs, Outcomes and Impacts

- Achievements to date of Van-KIRAP outputs and outcomes as compared with the end-of-project targets outlined in the project monitoring, evaluation and learning framework;
- Assess causality and attribution of results to Van-KIRAP project activities.
- Level of the awareness and ownership of the project by the stakeholders;
- Assess the likelihood of achieving project targets within the remaining project implementation period;
- Review aspects of the project that have already been successful, identify ways in which the project can further expand these benefits;
- Identify barriers to achieving the project objectives and targets in the remainder of the project;
- Identify significant unexpected effects, whether beneficial or detrimental.

2.4. Sustainability

- Is there an exit/sustainability strategy in place?
- Assess the extent to which the interventions and benefits of the project will continue after the end of the current external funding.
- Is it likely that the benefits of the project (capacities developed; linkages, mutual learning and knowledge and experiences shared) are sustainable?
- To what extent does the project contribute to VMGD's capacity development?
- To what extent does the current national policy environment support the project? (e.g. are there any changes in policies and priorities that may affect the potential sustainability of the benefits)
- Is there any public or private sector policy support likely to continue after the project?

2.5. Learning

- Identify good practices and lessons learned;
- Based on project successes, identify areas where knowledge generation and sharing is required;
- Documentation of the main challenges of Van-KIRAP and recommendations on how to overcome the challenges;
- Assess and document adaptive management in project management and implementation including how adaptive management lessons have been documented and shared with key partners;
- Identify what works, under what context and why for climate information services to the target Sectors and communities.
- Based on the findings and emerging lessons on what works in relation to climate information services integration and dissemination to Sectors and considering existing information on climate-related events in Vanuatu, recommend clear areas of focus for future programming.

- Based on what interventions has progressed with the identified community beneficiaries, document what learnings or issues are emerging from their perspective.

3. Methodology

The consultancy team should propose the methodology to be used to carry out the review. The proposed methodology should address sufficiently the preliminary issues and questions outlined within the ToR, specifying the specific review issues, questions, methods of data collection and analysis that will be undertaken. It should encompass a combination of both qualitative and quantitative methods. It should also allow for wide consultation with all interested parties and stakeholders. It is suggested that the methodology should include, but not be limited to the following, but consultants must propose their own methodology and justify and explain that proposal. The mid-term review will consist of three activities:

a) *Document review*: The consultant will review of relevant project documents including, but not limited to:

- Project Annual Reports
- Project Six-monthly Progress Reports
- Activity Annual Work Plans
- Project budget documents
- Mission Aide Memoires
- Project Proposal Document
- Project Component technical annexes and concept papers
- Project Implementation Manual
- Project Management Briefing Documents
- Project Operating Manuals
- Project Six-monthly Progress Reports
- Funded Activity Agreement (FAA)
- Documentation on meeting conditions under the FAA
- Documentation relating to relevant Project committees e.g. terms of reference, minutes etc

b) *Field visits*: The field work shall focus on the project initiatives that have been undertaken in the six Provinces. During these visits, the consultant shall contact, amongst others, national and provincial government officials, local communities, private sector, local public institutions, non-governmental organisations (NGOs) and community-based organisations (CBOs).

The field visits are expected to be undertaken by the Vanuatu-based consultant and will be limited in scope (2-3 Provinces) due to limitations in the implementation of activities across all six Provinces and timeframes required to visit all Provinces and project sites. Due to continued travel restrictions to Vanuatu from COVID-19 it is recognised there will be no site visits involving external team members.

c) *Interviews*: Interviews (both face-to-face and virtual) will be conducted during the mission with relevant Project beneficiaries, stakeholders, partners, Advisory Board and Technical Steering Committee members as well as team members to obtain input, share insights and identify recommendations to improve Project performance. Appropriate questionnaires shall be developed by the Mission team and discussed with the Implementing Entity and Project

Management team for approval (for Provincial field visits). Key informants will be drawn from the key project stakeholders including the beneficiary communities.

4. Deliverables / Expected Outputs

The Mission's findings and recommendations will be thoroughly discussed with SPREP, Green Climate Fund, Executing Entities, project partners and project management.

The Mission will complete and submit a draft final report in electronic format at the end of the mission. The Mission Leader will finalise the report in the light of comments / suggestions of stakeholders. The key outputs of the MTR are:

a) **Inception Report**: The Mission team is expected to produce an inception report detailing the following:
   a. A comprehensive description of the consultant's understanding of the Terms of Reference and indicating any major inconsistency or deficiency in the Terms of Reference and proposed amendments.
   b. A detailed methodology for the review including the tools to be used in the review.
   c. The proposed team members and a description of their respective roles.
   d. A complete work plan for the entire review period.
   e. A Draft Report Template containing Table of Contents for the final report.

b) **MTR Draft Report**: The Mission team is expected to generate the first draft report by the end of the third week after inception of the assignment. This draft report will be presented and discussed with key stakeholders including the Implementing Entity, project team, steering committee, technical working group and the donor. Inputs from these discussions will be incorporated into the final report.

c) **MTR Final Report**: The final report shall be submitted within two weeks of receiving comments on the draft report. 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. It should include a set of specific recommendations formulated for the project, and identify the necessary actions required to be undertaken, who should undertake those and possible timelines. The report shall be written in English.

d) **A brief paper** documenting changes (if any) to be made to the Project Plan as well as SPREP's Project Document. This will be annexed to the MTR Report.

e) **Presentation**: For presenting and discussing the draft final report interactively, the consultants will facilitate a virtual three-hour concluding workshop for the project stakeholders.

5. Qualifications of the Team

The MTR Mission will consist of at least a two-member team of consultants[5], each with at least 12 years of experience related to international development / climate change projects. The team will consist of a Team Leader and at least one member of the team must be based in Vanuatu who will lead on the in-country stakeholder consultations. The team's experience should include:

- Prior experience in evaluating projects of a similar nature and scope;
- Experience in conducting mid-term reviews or end of project evaluations for donor agencies, including demonstrated experience in evaluation report writing in accordance with donor evaluation requirements;
- Experience in climate change adaptation or resilience, environmental science, natural resource management, or related social science fields (e.g. sociology, governance, policy);
- The Team Leader will have expertise in one of the technical areas listed above as well as expertise and demonstrated experience in designing evaluation methodology and data collection tools and demonstrated experience in leading similar reviews / evaluations;
- The role of the Team Leader will be defining the approach and methodology, guiding and managing the review team, leading the mid-term review mission, drafting and revising, as required, the MTR reports and debriefing and presenting the findings;
- Excellent English communication skills. It would be an advantage for the Vanuatu-based consultant to be fluent in Bislama.

The proposal should clearly outline each team member, their role or function within the team and their relevant experience.

6. Assessment Criteria

Tenders will be assessed against the submission of a full proposal to include:

1. Proposed methodology to undertake the Mid-Term Review.
2. Proposed workplan including timelines to complete the deliverables (as outlined in Section 4).
3. Details of the review team including their role and experience (noting the minimum requirements of the team as outlined in Section 5).
4. CVs of the review team.
5. Financial proposal to outline all costs associated with the undertaking of the review including professional fees, Vanuatu-based travel costs to at least 2 sites (Santo and Efate), communications and miscellaneous costs inclusive of all taxes.

7. Schedule of the Assignment

The review will be carried out for 30 working days and is scheduled to take place in the period between 3rd May 2021 and 30th June 2021. The consultant shall develop and submit a detailed schedule for the assignment and distribute the days accordingly among the different tasks.

[5] Tenders may wish to include additional team members – experience and roles need to be clarified in the proposal. Note the team composition as submitted in the proposal is not subject to change.

8. Payment Schedule

The consultant's consortium shall be paid the consultancy fees upon completion of the following milestones:

- 30% after submission and presentation of the inception report
- 40% after submission and presentation of the draft report
- 30% after the approval of the final report

The Agreement template outlining terms and conditions is attached to this tender for consortium's information and reference (Annex II).

9. Management arrangements for the Review

The SPREP Implementing Entity Task Manager will have the overall management and coordination role of the review. The Task Manager will work with the Executing Entity's Project Management Units based in Vanuatu to facilitate the logistical requirements for consultants and setting up interviews and field visits.

Annex I: Van-KIRAP Project Logframe / Results Framework

PROJECT RESULTS (logic) FRAMEWORK (Updated February 2020)

This Results Framework is extracted from the approved project plan and is to be reviewed and updated annually in accordance with the GCF's Performance Measurement Framework under the Results Management Framework.

Paradigm Shift Objectives and Impacts at the Fund level[6]						
Paradigm shift objectives						
Increased climate-resilient sustainable development	The project will contribute to the GCF Paradigm shift potential objectives in three measurable ways: (1) the project will transform policy, planning and information delivery processes in Vanuatu to incorporate best available CIS. This will ensure informed climate 'smart' decision-making to facilitate climate resilient development (including adaptation and DRR planning) processes, (2) the project will catalyze (through the development and demonstration of applied CIS) mainstream application of CIS in development processes on a sustainable, long-term basis and (3) the project will enhance and strengthen dissemination, awareness and understanding of CIS to communities improving their access and uptake of CIS for more climate impact resilient based planning and decision-making.					
Expected Result	**Indicator**	**Means of Verification (MoV)**	**Baseline**	**Target**		**Assumptions**
				Mid-term (if applicable)	Final	
Fund-level impacts						
	Total number of direct and indirect beneficiaries	• Project baseline user survey • Project specific surveys (qualitative and quantitative), including socio-economic benefit (SEB) analysis at national economy/GDP scale • CIS tools and information • CIS bulletins	0	**Direct Beneficiaries** **Community engagement:** **(20% of target population)** Total: 8,730 Female: 4,302	**Direct Beneficiaries** **Community engagement:** **(75% of population):** Total: 43,652 Female: 21,509	1. Population of Vanuatu: 272,459. Female: 134,194; Male: 138,265 (2016 Census). **Direct Beneficiaries:** 1. Community engagement: Population calculated as 58,202

[6] Information on the Fund's expected results and indicators can be found in its Performance Measurement Frameworks available at the following link (Please note that some indicators are under refinement): http://www.gcfund.org/fileadmin/00_customer/documents/Operations/5.3_Initial_PMF.pdf

		• Provincial verification of use of tools and information (i.e. user surveys, interviews and testimonials, reports etc)		Male: 4,276 **Agricultural Sector (50% of farmers):** Total: 142 farmers Female: tbd Male: tbd **Fisheries Sector (50% of fishers):** Total: 746 fishers Female: tbd Male: tbd **Water Sector (50% of target population):** Total: 3,967 Female: 1,963 Male: 2,004 **Indirect beneficiaries (25% of the population)**	Male: 21,380 **Agricultural Sector:** Total: 285 farmers Female: tbd Male: tbd **Fisheries Sector:** Total: 1,492 fishers Female: tbd Male: tbd **Water Sector:** Total: 7,933 Female: 3,925 Male: 4,008 **Indirect beneficiaries** Total: 272,459	(Female: 28,679; Male: 28,506) at Area Councils for proposed Provincial community engagement activities e.g. Climate Centres. Project reach is calculated on 75% of the total population (assuming some people will not be reached, are in remote areas etc). 2. There will be 12 Climate Centres, 2 per province. 3. Agriculture sector: Number of farmers targeted through the case study. Does not include male / female breakdown. This will be determined at M&E plan development. 4. Fisheries sector: population provided for villages and census used for percentage of population engaged in fishing activities. Percentages applied to each of the villages. For Santo, focus is on Suranda area only. Census states 43.8% of HH in the Province are engaged in fisheries activities – project target calculates Suranda on 20% of HH / fishers in Province.

				Total: 68,114 Female: 33,548 Male: 34,566	Female: 134,194 Male: 138,265	5. Water sector: Total population of Luganville, Santos is 15,865 (Female: 7,850; Male: 8,015). Project assumption based on target of 50% of population will benefit directly from the Flood Management Plan and Flood EWS. 6. Tourism and Infrastructure are not included: these sectors are not targeting populations per se, beneficiaries will include tourism operators and Public Works with indirect beneficiaries being communities where infrastructure in future is built. **Indirect Beneficiaries:** 1. Figures are based on the total Provincial population 272,459. Female: 134,194; Male: 138,265 (2016 Census), assuming project tools and information is disseminated widely through VMGD and Sectors at Provincial level.

	Number of beneficiaries relative to total population	• Project specific user surveys • Activity based reporting, to collect numbers, particularly around engagement through the community climate change centers and case studies. Mid-term/final • Recent data sourced from national systems (e.g. data collected by the Vanuatu Chamber of Commerce – census data, household expenditure survey) • Vanuatu National Office of Statistics • Socio-economic benefit analysis at household economy scale	0%	**Direct Beneficiaries** **Community engagement:** Total: 3% Female: 3% Male: 3% **Agricultural Sector** Total: 0.35% **Fisheries Sector:** Total: 2.74% **Water Sector:** Total: 25% Female: 25% Male: 25% **Indirect beneficiaries** Total: 25% Female: 25% Male: 25%	**Direct Beneficiaries** **Community engagement:** Total: 16% Female: 16% Male: 16% **Agricultural Sector:** Total: 0.7% **Fisheries Sector:** Total: 5.48% **Water Sector:** Total: 50% Female: 50% Male: 50% **Indirect beneficiaries** Total: 100% Female: 100%	1. Total population used is the total Province population (272,459). Figures have been calculated for agriculture and fisheries on HH. 2. Water Sector: based on population of Luganville, Santos 3. Agriculture Sector: based on HH of 55,527 – 73% of HH involved in cropping activities (http://vnso.gov.vu) = 30,540 HH 4. One farmer = one HH 5. Fisheries Sector: based on 49% of HH in Vanuatu involved in subsistence fishing = 27,208HH. 6. One fisher = one HH

					Male: 100%	
A1.0 Increased resilience and enhanced livelihoods of the most vulnerable people, communities and regions	A.1.1 Change in expected losses of lives and economic assets (US$) due to the impact of extreme climate-related disasters in geographic area of GCF intervention	• Government reports from Vanuatu National Statistics Office • DMO reports • Official sources to cross check data e.g. World Bank, DFAT • Research reports or studies on SIS in Pacific and Caribbean – to provide estimates if no event occurs • Socio-economic benefit analysis at multiple levels (national to household economy scale) across all five sectors	US$ 56.1m damage and loss to Agriculture sector caused by TC Pam	Not applicable Project not operational by mid term	Up to 50% reduction in cost of loss and damage to agricultural sector at household level and up to 5% reduction in loss of GDP at national economy scale	• An event (climate-related disaster) occurs • Value of assets does not increase over period between climate-related disasters • There is sufficient early warning of a potential disaster and people are able to better prepare and take avoidance action • SEB analysis is based on assumptions comparing (national to household level) economy with CIS application in decision-making by key stakeholders and without CIS (counterfactual) over time, as per methodology described by Newth et al (2017)
			US$ 88.1m damage and loss to Tourism sector caused by TC Pam	Not applicable Project not operational by mid term	50% reduction in cost of loss and damage to tourism sector	

			11 lives lost due to TC Pam	Not applicable Project not operational by mid term	No loss of life	
A2.0 Increased resilience of health and well-being, and food and water security	A2.2 Number of food-secure households (in areas/periods of climate change impact)	• Case study data and information on the uptake of CIS to support more productive and year-round production of food in communities associated with the climate change centers. • Midterm /final evaluation & SEB drawing on community surveys • Vanuatu agricultural statistics	0	888 HH	1,777 HH	• The agriculture and fisheries sectors have multiple case study sites focusing on food security. • Based on number of farmers and fishers benefiting directly from the Project. One farmer / fisher = one HH • Assumes 30,540 HH undertake cropping activities and 27,208 HH undertake fishing activities (2016 mini census)

H.1.2. Outcomes, Outputs, Activities and Inputs at Project/Programme level

Expected Result	Indicator	Means of Verification (MoV)	Baseline	Target		Assumptions
				Mid-term (if applicable)	Final	
Project/ programme outcomes	**Outcomes that contribute to Fund-level impacts**					
	Number of CIS-based technologies and innovative solutions transferred or licensed at sectoral level to promote climate resilience in direct	• Procurement documents, instrument manuals and Installation & commission reports	Rain gauges, river gauges, CLEWS	At least one and up to 4 technologies or solutions procured, developed and	At least two and up to 8 technologies or solutions	• Technologies refers to observational networks (AWS, ocean buoys, river gauges etc), CIS DSS (e.g. Apps,

	and indirect beneficiaries as a result of Fund support	• Progress reports • M&E Plan and reports illustrating use and impact		implemented supporting climate resilience at Sector and Community level	procured, developed and implemented supporting climate resilience at Sector and Community level	Portals), transfer of information to Next / end-users (e.g Sectors and Communities)
A5.0 Strengthened institutional and regulatory systems for climate-responsive planning and development	A5.1 Institutional systems that improve incentives for climate resilience and their effective implementation	• CIS Action and Communications Plans • Project specific surveys • Reports from Community Center activities • Reports from Case study activity • minutes • Project Steering Committee • Annual project M&E review and report • Institutional level capacity building activities for target CIS users, focal points, advocacies etc from tailored CIS training workshops, training courses etc	Limited or ineffectual institutional links between VMGD and Sectors strengthened through improved dissemination and coordination of CIS Limited traditional knowledge and climate science combined to inform target Communities) CIS-based capacity mapping of sectoral decision-makers over time for the course of the project	Collaboratory links established between VMGD and Sectors with initial information flow commencing Min. 20% and up to 50% of Community climate centres established and operational Sector coordinators and immediate teams have accredited CIS capacity and being applied in case studies	Sectors are utilising CIS on in their decision-making and planning on mainstream basis across their business Sector protocols implemented for receipt and dissemination of CIS including as specified in relevant sector strategic and/or management plans and associated annual work plans Demonstrated use of TK and climate science into community level actions	• The project focuses only on improving current institutional systems, i.e. to incorporate use of CIS into strategic and/or operational decision-making • Sector authorities are willing to adopt new mechanisms to ensure mainstreaming of CIS in planning and decision making. • Core national baseline data relevant to specified indicators are available and accessible for relevant sectors • Project-based activity designed to undertake triple bottom-line (SEB) assessment of project impact is appropriately

						resourced and implemented • Project level scope and scale of project-based activity, including capacity development, is sufficient to realize expected sustainable project level outcomes and impacts
		• CIS Action and Communications Plans • Project specific surveys • Reports from Community Center activities • Reports from Case study activity • minutes • Project Steering Committee • Annual project M&E review and report	0 SEB Database	0 SEB Database developed - (Project not fully operational by midterm)	1 SEB Database developed and used to develop Business Case	
	A5.2. Number and level of effective coordination mechanisms	• CIS Action and Communications Plans • Project specific surveys • Reports from Community Center activities, including project centric engagements and activities with target	0 Sector Coordinators	5 sector coordinators able to initiate sector coordination and implement case studies	5 sector coordinators able to provide guidance on application of CIS information and guide the development of sectoral plans,	• The project focuses only on improving current institutional systems (i.e. to incorporate use of CIS) through developing and demonstrating real-time CIS applications as part of agreed case studies,

		users/user groups, networks etc • Reports from Case study activity including project centric engagements and activities with target users/user groups, networks etc • Minutes of meetings • Project Steering Committee • Annual project M&E review and report			and complete case studies.	• Sector authorities are willing to adopt new mechanisms to ensure mainstreaming of CIS in planning and decision making, initially as part of case studies and in longer term mainstreamed as part of core business. • Core national baseline data relevant to specified indicators are available and accessible for relevant sectors • Project-based SEB activity designed to undertake triple bottom-line assessment of project impact is appropriately resourced and implemented • Project level scope and scale of project-based activity, including capacity development, is sufficient to realize expected sustainable project level outcomes and impacts
			0 VMGD-Sector MoUs / VMGD fragmented and one-way communication with sectors on CIS	5 VMGD-Sector MOUs / VMGD able to initiate case studies and coordinate regular communication with 5 sectors on CIS needs and initiate applications as part of case studies	5 VMGD-Sector MOUs / VMGD able to coordinate development and delivery of CIS according to 5 sectors feedback and needs and demonstrate applications and impacts and ongoing capacity as part of completed case studies	
			0 VMGD and Sector coordination of CIS delivery in 0 communities	50% of all case study sites and Community Climate Centres established and utilising CIS	100% of case study sites and Community Climate Centres established and utilising CIS	

	A6.2 Use of climate information products /services in decision making in climate- sensitive sectors	• Project specific survey • Project specific survey (e.g. randomized/facebook) • Case study data and information (e.g. infrastructure and tourism) • Delivery Partner outputs e.g hazard maps, climate data and portals, downscaling • Socio-economic Benefit (SEB) analysis	Few Sectors are utilising CIS in clear decision-making examples Baseline for SEB is counterfactual scenario i.e. decision-making to inform climate action without CIS	Five examples of use of Project CIS outputs into sector policies, planning, guidelines and / or investment decisions i.e. one example by way of case study for each of five sectors	Up to 25 examples of use of Project CIS outputs into sector policies, planning, guidelines and / or investment decisions i.e. up to five examples by way of case study outputs for each of five sectors	• Sector authorities and associated direct beneficiaries are willing to adopt new governance, institutional, regulatory and other mechanisms to ensure mainstreaming of CIS in planning and decision making • Only 200 Government and NGOs are using the climate bulletins and data. This is 0.06% of the Vanuatu population • Five-25 examples is based on target sector case studies. At least one-five example per Sector.
A7.0 Strengthened adaptive capacity and reduced exposure to climate risks	A7.1 Use by vulnerable households, communities, businesses and public-sector services of Fund-supported tools, instruments, strategies and activities to respond to climate change and variability	• Data and information collected associated with the sector specific case studies and activity data and information demonstrating uptake of CIS • Project specific surveys – scorecards	0% of beneficiaries say they use project tools/instruments/strategies, instruments or activities and have improved response to climate change and variability Baseline for SEB is counterfactual scenario i.e. decision-making to inform	Min. 10% and up to 20% of target beneficiaries say they use project tools/instruments/strategies/instruments or activities and have improved response to climate change and variability	Min. 40% and up to 60% of target beneficiaries say they use project tools/instruments /strategies/instruments or activities and have improved response to climate change and variability	• • Target beneficiaries are directly linked to sectoral case studies • Vulnerable communities prioritize CIS engagement and knowledge to improve their preparedness and resilience to climate hazards • Sector authorities are willing to adopt new governance,

		• Evaluative/baseline studies associated with the development and application of the project CLEWS • Socio-economic Benefit (SEB) analysis	climate action without CIS			institutional, regulatory and other mechanisms to ensure mainstreaming of CIS in planning and decision making • Only 200 Government and NGOs are using the climate bulletins and data. This is 0.06% of the Vanuatu's population
	A7.2 Number of males and females reached by climate related early warning systems and other risk reduction measures established /strengthened	• Sarakata Flood EWS and Flood Management & Response Plan • Progress reports • Surveys • Socio-economic Benefit (SEB) analysis	Female: 0 Male: 0 beneficiaries accessing EWS or risk reduction measures Baseline for SEB is counterfactual scenario i.e. decision-making to inform climate action without CIS	Total: 3,967 Female: 1,963 Male: 2,004	Total: 7,933 Female: 3,925 Male: 4,008	• Total number of beneficiaries for Sarakata EWS is 50% of Luganville population (15,865) • Assuming 50% of the population is not affected by flooding • Increasing number of people do not move into the flood plain area • Existing investment of public and private infrastructure assets remains same or increases over time
A8.0 Strengthened awareness of climate threats and risk-	A8.1 Number of males and females made aware of climate threats and related appropriate responses	• Data and information associated with case studies and Climate Centers and other activities to be explored	0 Baseline for SEB is counterfactual scenario i.e. decision-	**Direct Beneficiaries**	**Direct Beneficiaries** Total: 53,362	• Beneficiaries = total of communities (ie. Climate centres), agriculture, fisheries and water sector beneficiaries

reduction processes		and verified through evaluations. • Project specific survey • Climate Centre reports and surveys • Workshop reports and records • Communication tools, products etc • CIS tools and products • Surveys and interviews • Analysis of user data for project portal, websites, phone apps etc forn accessing CIS • Socio-economic Benefit (SEB) analysis	making to inform climate action without CIS	Total: 13,585 Female: 6,265 Male: 7,168 **Indirect Beneficiaries** Total: 68,114 Female: 33,548 Male: 34,566	Female: 25,434 Male: 27,165 **Indirect Beneficiaries** Total: 272,459 Female: 134,194 Male: 138,265	• Male only in agriculture and fisheries sectors • Communication networks between VMGD, Sectors and Communities is in place • Sex disaggregated census data is available from the Government and/or from further surveys/analysis (including SEB analysis)

Expected Result	Indicator	Means of Verification (MoV)	Baseline	Target		Assumptions
				Mid Term	Final	
Project/programme outputs (Project Component outputs)	**Outputs that contribute to outcomes**					
Output 1.1. Strengthening climate information services through data and interfaces	Climate data digitised, homogenized and uploaded into the VMGD portals	• CLiDE and Pacific Climate Change Data Portal updated with new data • Tropical Cyclone data portal updated	Portals established but do not have old data	100% of old data records digitised and uploaded into portals	New data generated by Project uploaded into portals	• ICT platform will be enough to support proposed functions and platforms • VMGD has the capacity to maintain and operate system
	VMGD IT platform upgraded	• IT platform upgraded with hardware and software • ICT Assessment Report • Activity report	IT platform in place but without hardware and software to support data and portals	Operational ICT system in place to support DSS tools and processes	ICT system maintained	• ICT platform will be enough to support proposed functions and platforms • VMGD has the capacity to maintain and operate system
	User interfaces have been strengthened to support CIS decision-making	• CLEWS is operational • Progress reports	CLEWS is established however requires new software applications	Software applications modified and operational	CLEWS is operational with new data	• VMGD have capacity to continue development of CLEWS
		• Vanuatu Climate Futures portal • Progress reports	No Vanuatu Climate Futures portal in place	Beta version of VCFP IT platform established and under testing	Vanuatu Climate Futures portal which will provide access to information on climate change relevant to planning and	• VMGD and Sectors will utilise the Portal • Next / end-users will be involved in testing of the portal

					decision-making for the five priority sectors	
Output 1.2. Research, modelling and prediction to support CIS tools and uptake	Three observational networks established and operational	• Field reports illustrating Equipment installed and functioning • Progress reports • Management Plans • Monitoring reports • Climate models	Limited observational networks in sites	Equipment for observational networks procured, installed and transmitting data to VMGD and Sectors	Data from observational networks utilised in at least three VMGD and/or Sector monitoring networks, climate models and Management Plans	• VMGD have the capacity to procure and install the observational equipment • Monitoring and analysis of data will be seamless and linked to current systems • Data from observational networks will be available to Sectors and utilised in CIS development
	Seasonal climate forecasts have improved utility and functionality	• Standard Operating Procedures • Station datasets • Downscaled end-user products	Limited to no seasonal climate forecasts and products	Methodology and SOPs developed for seasonal impact forecasts for priority sectors	At least two seasonal climate forecast products produced and used by end-users	• VMGD and Sectors will utilise the products in decision-making
	Long-term projections developed	• Global Climate model projections • CIS applications and products • Progress reports	Limited to no long-term projections available	Modelling framework and downscaled CIS developed	At least two CIS products utilising projections and data and available from the user interface platform	• Sectors will utilise the model in their case studies
	Risk-based coastal and climate hazard mapping undertaken for Vanuatu	• Model • CIS products • Sector plans / policies • Progress Reports	Limited to no hazard maps in use for decision making	(i) Climate hazard hotspots identified and mapped (ii) Data incorporated into sector case studies	(i) Modelling framework developed (ii) At least two CIS products utilising data developed	• Sectors will utilise the model in their case studies

					(iii) At least two Sectors utilising data generated from activity in decision-making and / or plans	
	Vulnerability mapping of the coastal zone in Vanuatu completed for target areas	• Biogeochemical and hydrodynamic model for coastal areas • CIS products • Progress reports	Limited to no hazard maps in use for decision making	(i) Modelling framework established, and data collected and analysed	(i) Biogeochemical and hydrodynamic model developed (ii) Ocean acidification and marine impact projection maps developed (iii) At least two demonstrations of the model information used in Sector decision making / planning	• Sectors will utilise the model in their case studies
	Agro-met predictions for cropping systems developed	• VaCSA platform • Crop-climate Diary App • Agro-met data analysis report • Standard Operating Procedures • Progress Reports • Training reports	No agro-met predictions in place and no tools available	(i) VaCSA prototype installed (ii) Agriculture sector baseline assessment undertaken	(i) Crop-climate Diary mobile App available for download (ii) VaCSA operational and integrated with Crop-climate Diary	• Farmers will utilise the App
Output 2.1. CIS implemented within target sectors	Agricultural practices strengthened through the use of climate information services to improve crop production	• Agriculture demonstration sites • CIS tools and products for agricultural sector • Climate change projections for the agriculture sector • Threshold analysis and report	Limited to no scope and scale for crop testing against climate impacts	(i) Demonstration sites established for case studies (ii) Climate change projections developed	(i) Demonstration of CIS-Sector related products utilised in decision-making on-ground for all relevant provinces (ii) Analysis and report on findings	• CIS can be adapted to and/or assimilated into and implemented as part of existing sectoral strategies, management plans, work plans etc • Findings from field sites can be scaled up across other

					for testing thresholds for crops in all relevant provinces	agricultural regions in Vanuatu • Sector will work closely to incorporate findings from Activity 1.2.6
	Fisheries sector is strengthened through the use of CIS in MPA Management Plans	• MPA Management Plans • Progress reports • Training reports	Limited fisheries plans in place and restricted to specific areas	(i) Draft Management Plans for case study sites (ii) undertaken in at least 3 communities	(i) Management Plans finalised and in place for demonstration sites in all relevant provinces (ii) Communities are applying CIS to facilitate practice change in multiple activities	• CIS can be adapted to and/or assimilated into and implemented as part of existing sectoral strategies, management plans, work plans etc • Sub-sectoral planning (e.g. MPA Management Plans) will be effectively modified and implemented • MPA Mngt Plans are an effective mechanism for climate adaptation for fisheries
	Vanuatu infrastructure design strengthened utilising climate data in the design and construction phases	• PW Design Standards • Progress reports	No existing software or data to predict flood prone areas, flood levels, high or king tide levels at specific infrastructure sites or locations	For case study sites: (i)Database on bathymetric and topographic data developed (ii) Coastal inundation maps developed	For all of Vanuatu: Design Standards for Infrastructure updated, and Public Works Department engineers trained in new standards and climate information	• CIS can be adapted to and/or assimilated into and implemented as part of existing sectoral strategies, management plans, work plans etc • Public Works executives support revision of Design Standards • Government ensures all future construction adheres to Design Standards and uses climate change information in design and construction • CSIRO and Sector will work effectively

						together to produce required maps
	Improved water management and security in the Sarakata catchment	• Flood Management & Response Plan • Flood Early Warning System • Progress Reports	No Flood Management Plan or EWS in place	(i) Draft Flood Management & Response Plan developed and/or modified to incorporate CIS input (ii) Integrated Water Management Committee established and operational to facilitate CIS-based decision-making (iii) Operational groundwater model developed and/or adapted for application as part of case study	For all relevant provinces: (i) Flood Management & Response Plan implemented incorporating CIS (ii) Flood Early Warning System in place incorporating CIS. (iii) Water management decisions utilising CIS from the groundwater modelling	• CIS can be adapted to and/or assimilated into and implemented as part of existing sectoral strategies, management plans, work plans etc • Flood Management Plan and EWS can only be "tested" if there is a flood during project life and whilst these have been established
	Tourism sector is utilising climate information services in decision-making	• Standard Operating Procedures • Maps / models of future 'hotspots' • Progress reports • Tourism investment report	Zero baseline	(i) Standard Operating Procedures for local tourism bungalow design developed and/or modified to incorporate CIS input	For all relevant provinces: (i) Evidence of tourism operators utilising the SOPs (ii) Report on future tourism investment opportunities	• CIS can be adapted to and/or assimilated into and implemented as part of existing sectoral strategies, management plans, work plans etc • Sector will effectively engage with tourism operators • Government and private investors will

				(ii) Tourism 'hotspots' identified and mapped	tabled with private and public sector (iii) Evidence of tourism operators utilising CIS tools e.g. EWS	see value in report outlining future projections and hotspots and use for decision-making
Output 2.2. CIS is incorporated into community practices	Communities are engaged and utilising CIS at 12 sites	• Climate Centres • Progress reports • Surveys and interviews	Counterfactual : No communities are engaged through the project No climate centres established	(i) 50% (6) of Climate Centres are established and operational	(i) 100% (12) Climate Centres established and operational beyond life of project (ii) Communities perceive benefit from the information provided	• Communities are not receiving CIS or climate related information frequently and / or not using information in decision-making • It will be possible to establish 12 Centres over life of project and ensure flow of information to remote areas
Output 2.3. Socio-economic benefit analysis for Vanuatu utilising the customised Pacific CIS cost-benefit framework is produced	A SEB on return on investment in climate information services is utilised in decision-making	• SEB Database • Annual SEB reports • Progress reports	SEB baseline is counterfactual scenario where CIS is not available and / or is not routinely applied as mainstream evidence-base for decision-making to inform climate action	(i) SEB database established and populated (ii) At least one SEB report produced	Vanuatu Government utilised SEB to develop business case for continued funding of CIS	• Vanuatu Government will utilise the SEB to develop a business case for investment in CIS on longer-term basis (i.e. post project)
Output 3.1. Traditional knowledge is incorporated into climate information services in Vanuatu	CIS tools and products incorporate TK and climate science and uptake by communities	• TK Strategy • Progress reports • TK Database	TK networks established through CoSPACC and	(i) TK strategy implemented and TK data	(i) At least four CIS tools or products incorporating TK and climate	• TK is being collected via CoSPACC however no climate science is being integrated with the TK

		• CIS tools and materials incorporating TK and science	some data collected and analysed	observational network in place. (ii) At least one example of TK data collected and integrated into CIS tools	science and utilised by communities	to develop community-level tools, information products etc
Output 3.2. Developing CIS tools and information products for target end-users	Decision support tools are developed and in use by Sectors and communities	• Progress reports • CIS tools and products • Interviews and surveys of Next / end-users as part of project ME&L	No project-developed tools	At least one CIS tool is developed and being tested with Next / end-users as part of each of five sectoral case studies	(i) At least five CIS decision support tools developed, tested and utilised in the five target Sectors for target user communities	• CIS tools refer to new and/or value-added tools and products developed under the Project and not prior products / tools
Output 3.3. Implementing knowledge management, engagement and outreach across sectors and communities	CIS tools and information is used to strengthen Sectors and communities to climate change impacts	• KM & Communication strategy • Awareness materials and campaigns • CIS tools and products • Social media / website • Media stories • Progress reports • Interviews and surveys of Next / end-users as part of project level ME&L	No Strategy developed and in place. No project-developed tools and information	(i) KM & Communication Strategy developed (ii) At least 10 awareness materials and / or campaigns undertaken	(i) 40 campaigns to promote CIS to Next / end-users (ii) 50% of respondents perceive benefit from the Project CIS tools and products, and knowledge products	• 'Campaign' means product, tool, social media campaign, media, community awareness sessions etc
Output 4.1. Institutional capacity to implement CIS across sectors strengthened	Sectors are using CIS in their decision-making	• Review reports and recommendations • Sector Communication & Action Plans • Progress reports • Surveys and interviews	Little to no uptake / dissemination of CIS from VMGD to Sectors	At least 25 and up to 50% of recipients perceive benefit from training and utilising it in their workplace	At least 50 and up to 75% of recipients perceive benefit from training and utilising it in their workplace	• Sectors are not utilising CIS in their planning • VMGD to strengthen institutional links to Sectors
Output 4.2. Training of personnel leads to strengthening of institutional capacity	Capacity and knowledge of climate change and CIS is	• Training reports • Training packages • Progress reports • Surveys and interviews	Prior training packages have been developed	At least 25 and up to 50% of recipients perceive benefit from	At least 50 and up to 75% of recipients perceive benefit from	• Prior training courses have not targeted current staff

	improved within VMGD and targeted Sectors		under CoSPACC	training and utilising it in their workplace	training and utilising it in their workplace	

Reporting Against WMO GFCS

WMO GFCS	Expected Result	Indicator	Means of Verification (MoV)	Baseline	Target	
					Mid Term	Final
Components of GFCS	**Project/programme outputs** (Project Component outputs)	**Outputs that contribute to outcomes**				
The five structural components of the GFCS are integral to the design, implementation and evaluation of the Van KIRAP project, with key elements of the project's scope of work across Outputs 1-5 mapping directly to relevant activities and associated KPIs for each of these five components as outlined below. In particular, Output 2.3. *Socio-economic benefit analysis for Vanuatu utilising the customised Pacific CIS cost-benefit framework,* is a key activity which will be used by the project to undertake analysis of the socio-economic costs and benefits of the delivery and application of CIS for Van KIRAP across all elements of the GFCS components. This analysis is based on the framework developed specifically for Van KIRAP (Newth et al, 2017) as part of the GCF Readiness Project for Vanuatu. It is based on assessment using established economic modelling capability to produce both quantitative (standardised econometrics) and qualitative data output to align with and inform the Log Frame, as an adjunct measure of impact in addition to the other indicators and MOVs/targets etc referred in this Log Frame. In particular it should be noted that the design of this cost-benefit framework makes specific reference to the GFCS and is appropriately aligned with each of the five key components of the GFCS. In this context it is noted that the GFCS is a fully integrated framework based on a number of critical interdependent functions between the five designated components but that the cost-benefit impacts are best evaluated cumulatively rather than individually. In practice therefore for the Van KIRAP project, in addition to addressing KPIs outlined below which are specific to each of the five GFCS components, the Pacific CIS Cost-Benefit Framework will assess cost-benefit impact from CIS delivery cumulatively across all five components of the GFCS disaggregated at national economy, household economy and across gender and sector where appropriate.						
User Interface Platform: Users can make their voices heard through the Platform and make sure climate services are relevant to their needs.	Output 2.1. CIS implemented within target sectors	Agricultural practices strengthened through the use of climate information services to improve crop production	• Agriculture demonstration sites • CIS tools and products for agricultural sector • Climate change projections for the agriculture sector Threshold analysis and report	Limited to no scope and scale for crop testing against climate impacts	(i) Measurable sector-specific user access of Van KIRAP Portal for CIS (Ii) Demonstration sites established (iiI) Climate change projections developed	(i) Significant increase measured in sector specific user access of VK portal for CIS (iI) Demonstration of CIS-Sector related products utilised in decision-making on-ground (Iii) Analysis and report on findings for testing

						thresholds for crops
		Fisheries sector is strengthened through the use of CIS in MPA Management Plans	• MPA Management Plans • Progress reports • Training reports	Limited fisheries plans in place and restricted to specific areas	(i) Measurable sector-specific user access of Van KIRAP Portal for CIS (iI) Draft Management Plans for case study sites (iiI) undertaken in at least 3 communities	(i) Significant increase measured in sector specific user access of VK portal for CIS (ii) Management Plans finalised and in place for demonstration sites in all relevant provinces (iii) Communities are applying CIS to facilitate practice change in multiple activities
		Vanuatu infrastructure design strengthened utilising climate data in the design and construction phases	• PW Design Standards • Progress reports	No existing software or data to predict flood prone areas, flood levels, high or king tide levels at specific infrastructure sites or locations	(i) Measurable sector-specific user access of Van KIRAP Portal for CIS (ii)Database on bathymetric and topographic data developed (iii) Coastal inundation maps developed	(i) Significant increase measured in sector specific user access of VK portal for CIS (ii) Design Standards for Infrastructure updated, and Public Works Department engineers trained in new standards and climate information

		Improved water management and security in the Sarakata catchment	• Flood Management & Response Plan • Flood Early Warning System • Progress Reports	No Flood Management Plan or EWS in place	(i) Measurable sector-specific user access of Van KIRAP Portal for CIS (ii) Draft Flood Management & Response Plan developed and/or modified to incorporate CIS input (iii) Integrated Water Management Committee established and operational to facilitate CIS-based decision-making (iii) Operational groundwater model developed and/or adapted for application as part of case study	(i) Significant increase measured in sector specific user access of VK portal for CIS For all relevant provinces: (i) Flood Management & Response Plan implemented incorporating CIS (ii) Flood Early Warning System in place incorporating CIS. (iii) Water management decisions utilising CIS from the groundwater modelling
		Tourism sector is utilising climate information services in decision-making	• Standard Operating Procedures • Maps / models of future 'hotspots' • Progress reports • Tourism investment report	Zero baseline	(i) Measurable sector-specific user access of Van KIRAP Portal for CIS (ii) Standard Operating Procedures for local tourism bungalow design	(i) Significant increase measured in sector specific user access of VK portal for CIS (ii) Evidence of tourism operators utilising the SOPs (iii) Report on future tourism

					developed and/or modified to incorporate CIS input (iii) Tourism 'hotspots' identified and mapped	investment opportunities tabled with private and public sector (iv) Evidence of tourism operators utilising CIS tools e.g. EWS
	Output 2.2. CIS is incorporated into community practices	Communities are engaged and utilising CIS at 12 sites	• Climate Centres • Progress reports • Surveys and interviews	No communities are engaged through the project No climate centres established	(i) 50% (6) of Climate Centres are established and operational	(i) 100% (12) Climate Centres established and operational beyond life of project (ii) Communities perceive benefit from the information provided
Climate Services Information System: The production and distribution system for climate data and information products that address user needs.	Output 1.1. Strengthening climate information services through data and interfaces	Climate data digitised, homogenized and uploaded into the VMGD portals	• CLiDE and Pacific Climate Change Data Portal updated with new data • Tropical Cyclone data portal updated •	Portals established but do not have old data	100% of old data records digitised and uploaded into portals	New data generated by Project uploaded into portals
		VMGD IT platform upgraded	• IT platform upgraded with hardware and software • ICT Assessment Report • Activity report	IT platform in place but without hardware and software to support data and portals	Operational ICT system in place to support DSS tools and processes	ICT system maintained
		User interfaces (including Van KIRAP portal) have been strengthened to support CIS decision-making	• CLEWS is operational • Progress reports	CLEWS is established however requires new software applications	Software applications modified and operational	CLEWS is operational with new data

			• Van KIRAP portal • Progress reports	No Van KIRAP portal in place	Beta version of VCFP IT platform established and under testing	Van KIRAP portal operational and will provide access to CIS on climate change relevant to planning and decision-making for the five priority sectors
	Output 3.1. Traditional knowledge is incorporated into climate information services in Vanuatu	CIS tools and products incorporate TK and climate science and uptake by communities	• TK Strategy • Progress reports • TK Database • CIS tools and materials incorporating TK and science •	TK networks established through CoSPACC and some data collected and analysed	(i) TK strategy implemented and TK data observational network in place. (ii) At least one example of TK data collected and integrated into CIS tools	(i) At least four CIS tools or products incorporating TK and climate science and utilised by communities
	Output 3.2. Developing CIS tools and information products for target end-users	Decision support tools are developed and in use by Sectors and communities	• Progress reports • CIS tools and products • Interviews and surveys of Next / end-users •	No project-developed tools	At least two CIS tools are developed and being tested with Next / end-users	(i) At least four decision support tools developed, tested and utilised in the five target Sectors and six target communities
	Output 3.3. Implementing knowledge management, engagement and outreach across sectors and communities	CIS tools and information is used to strengthen Sectors and communities to climate change impacts	• KM & Communication strategy • Awareness materials and campaigns • CIS tools and products • Social media / website • Media stories • Progress reports • Interviews and surveys of Next / end-users	No Strategy developed and in place. No project-developed tools and information	(i) KM & Communication Strategy developed (ii) At least 10 awareness materials and / or campaigns undertaken	(i) 40 campaigns to promote CIS to Next / end-users (ii) 50% of respondents perceive benefit from the Project CIS tools and products, and knowledge products

Observations and Monitoring: The essential infrastructure for generating the necessary climate data.	Output 1.2. Research, modelling and prediction to support CIS tools and uptake	Three observational networks established and operational	• Field reports illustrating Equipment installed and functioning • Progress reports • Management Plans • Monitoring reports • Climate models	Limited observational networks in sites	Equipment for observational networks procured, installed and transmitting data to VMGD and Sectors	Data from observational networks utilised in at least three VMGD and/or Sector monitoring networks, climate models and Management Plans
	Output 2.3. Socio-economic benefit analysis for Vanuatu utilising the customised Pacific CIS cost-benefit framework is produced	A SEB analysis on return on investment in climate information services is utilised in CIS based decision-making	• SEB Database • Annual SEB reports • Progress reports	No SEB database or analysis in place	(i) SEB database established and populated (ii) At least one SEB report produced	Vanuatu Government utilised SEB to develop business case for continued funding of CIS at sectoral level
Research Modelling and Prediction: To advance the science needed for improved climate services that meet user needs.	Output 1.2. Research, modelling and prediction to support CIS tools and uptake	Seasonal climate forecasts have improved utility and functionality	• Standard Operating Procedures • Station datasets • Downscaled end-user products	Limited to no seasonal climate forecasts and products	Methodology and SOPs developed for seasonal impact forecasts for priority sectors	At least two seasonal climate forecast products produced and used by end-users
		Long-term projections developed	• Global Climate model projections and guidance materials • CIS applications and products • Progress reports	Limited to existing (PACCSAP) long-term projections and associated CIS available	Modelling framework and where appropriate downscaled CIS developed	At least one and up to five CIS products utilising projections and data and available from the user interface platform for each of five sectors
		Risk-based coastal and climate hazard mapping undertaken for Vanuatu	• Model projections and guidance materials • CIS products • Sector plans / policies • Progress Reports	Limited to no hazard maps in use for decision making	(i) Climate hazard hotspots identified and mapped (ii) Data incorporated into	(i) Modelling framework developed (ii) At least one and up to five CIS products utilising

					sector case studies	data developed for each of five sectors (iii) All Sectors utilising data generated from activity in decision-making and / or plans
		Vulnerability mapping of the coastal zone in Vanuatu completed for target areas	• Biogeochemical and hydrodynamic model outputs and guidance materials for coastal areas • CIS products • Progress reports	Limited to no hazard maps in use for decision making	(i) Modelling framework established, and data collected and analysed	(i) Biogeochemical and hydrodynamic model developed (ii) Ocean acidification and marine impact projection maps developed (iii) At least one and up to five CIS applications of the model information used in Sector decision making / planning
		Agro-met predictions for cropping systems developed	• VaCSA platform • Crop-climate Diary App • Agro-met data analysis report • Standard Operating Procedures • Progress Reports • Training reports	No agro-met predictions in place and no tools available	(i) VaCSA prototype installed (ii) Agriculture sector baseline assessment undertaken	(i) Crop-climate Diary mobile App available for download (ii) VaCSA operational and integrated with Crop-climate Diary
Capacity Development: It will support the systematic development of the institutions, infrastructure and	Output 4.1. Institutional capacity to implement CIS across sectors strengthened	Sectors are using CIS in their decision-making	• Review reports and recommendations • Sector Communication & Action Plans • Progress reports • Surveys and interviews	Little to no uptake / dissemination of CIS from	50% of recipients perceive benefit from training and utilising it in their workplace	80% of recipients perceive benefit from training and utilising it in their workplace

human resources needed for effective climate services.				VMGD to Sectors		
	Output 4.2. Training of personnel leads to strengthening of institutional capacity	Capacity and knowledge of climate change and CIS is improved within VMGD and targeted Sectors	• Training reports • Training packages • Progress reports • Surveys and interviews	Prior training packages have been developed under CoSPACC and PACCSAP	50% of recipients perceive benefit from training and utilising it in their workplace	80% of recipients perceive benefit from training and utilising it in their workplace

Activities	Description	Inputs	Description
Component 1: Strengthen the VMGD platform to provide quality climate data and information for CIS			
Activity 1.1.1: Improving the currency, functionality and visualization of climate data records for Vanuatu	Activity 1.1.1 focuses upon the improvement and strengthening of climate data within VMGD to support the climate information service portals, CIS tools and applications. The activity will involve lead scientists from the Australian Bureau of Meteorology (BOM) working closely with climatologists within VMGD to update and extend existing high-quality datasets through quality assurance procedures (i.e. homogenization) and to meet the WMO standards.	Technical expertise (BOM) Personnel (VMGD) Equipment IT equipment Travel Consultancies Office supplies Consumables	• Salaries for BOM and VMGD personnel • International travel for BOM personnel • IT equipment for digitisation of data • Equipment for establishing workplace for digitisation of hard-copy information • Office supplies for storage and archiving of hard copy information • Workshop for training of VMGD personnel to digitize data
Activity 1.1.2 Building and strengthening user interfaces to support CIS Decision-making	Improving VMGD's capability to provide integrated information via ICT systems to meet sector needs and demand for climate information through the upgrading of the IT Platform, provision of technical support for VMGD in developing CLEWS-based software application development and ground-truthing CLEWS and outreach to Next/End-Users, and developing the Vanuatu Climate Futures Portal for delivery of climate change projections.	Technical expertise (BOM & CSIRO) Personnel (VMGD) Travel Consultancies	• Salaries for BOM, CSIRO and VMGD personnel • International travel for BOM and CSIRO • Consultant to train and mentor Web and App Developer • Consultant to review ICT platform and provide recommendations for upgrade • IT equipment to improve VMGD ICT platform • IT consumables
Activity 1.2.1. Upgrading and expanding the Vanuatu observational networks	Aims to fill spatial and temporal gaps in the national observation network by installing meteorological instruments that collect and transmit essential data for developing and validating CLEWS, seasonal forecasts and climate change projections. Training of VMGD staff on installation, operation and maintenance of instruments, acquisition of data and analysis of data is a vital element of this output. Operations manuals and Standard Operating Procedures (SOP) will be updated or developed to	Personnel (VMGD) Consultancies Equipment Travel Workshops / Training Community consultations Awareness materials	• Salaries for VMGD personnel • Travel for site visits • Consultancies for procurement and installation of equipment • Equipment as per budget plan • Freight costs to transport equipment to sites • Local labour costs for installation and maintenance of grounds for equipment • Consultant to undertake CBA of radar weather systems

	ensure all instruments are correctly operated and maintained in the long-term.	Local labour	
Activity 1.2.2. Improved utility and function of seasonal climate forecasts	Improve the utility and functionality of seasonal climate forecasts through the upgrading of station-based forecasts to a new, state-of-the-art seasonal forecast model ACCESS-S. This will provide new rainfall and temperature forecasts for all areas of Vanuatu, at a higher resolution in both time and space. A key feature increasing the resolution, will be further downscaling this data to provide an even higher level of detail on rainfall and temperature conditions and integrating this information with sector defined CIS.	Technical expertise (BOM) Personnel (VMGD) Travel Workshops / Training	• Salaries for BOM and VMGD personnel • International travel for BOM personnel • Training workshop for VMGD and Sector staff •
Activity 1.2.3. Long-term projections for key climate variables and climate extremes for Vanuatu	Development of multi-model ensemble of projected changes for temperature, rainfall, drought and tropical cyclones for Vanuatu. The results will be published through CIS; outreach to target Next/End-Users; training and sector-based case study.	Technical expertise (CSIRO) Personnel (VMGD) Travel Workshops / Training	• Salaries for CSIRO and VMGD personnel • International travel for CSIRO personnel • Training workshops • Information gathering workshops
Activity 1.2.4. Risk-based coastal and other climate hazard analysis and mapping	1. Synthesise and report coastal inundation probability (hazard) data in the form of CIS for designated coastal 'hot spots' in the context of case studies and related risk assessments for priority sectors, and facilitate outreach to target Next/End-Users 2. Develop current and projected extreme sea level probabilities and associated coastal hazard information as CIS to inform sectoral applications in Vanuatu	Personnel (VMGD) Technical expertise (CSIRO) Travel Workshops / Training	• Salaries for CSIRO and VMGD personnel • International travel for CSIRO personnel • Training workshops • Information gathering workshops
Activity 1.2.5. Vulnerability mapping of the coastal zone in Vanuatu	Will use a multidisciplinary approach bringing together reef health and ocean chemistry and temperature science with a regionally specific coupled marine biogeochemical-hydrodynamic model to explore when, when and how coral ecosystems in Vanuatu will be impacted, what management options are available, develop key indicators and 'intervention points,' to inform longer-term planning for climate vulnerable/high impact	Personnel (VMGD) Technical expertise (CSIRO) Travel Workshops / Training Equipment	• Salaries for CSIRO and VMGD personnel • International travel for CSIRO personnel • Training workshops • Information gathering workshops • Equipment e.g. LIDAR, satellite etc as per budget plan

	areas and sectors e.g. inshore commercial and subsistence fishing and for marine protected/other management zones of high natural resource, biodiversity, tourism and cultural value. Such data and information will be then delivered to other activities to develop sector specific CIS products to inform relevant sectoral case studies, with particular emphasis on the Fisheries and Tourism sectors.		
Activity 1.2.6. Developing tailored Agro-met predictions for target cropping systems	Activity 1.2.6 will produce key outputs to be developed and operationalized in Vanuatu's Agriculture sector, contributing to the sector's case study activity. Key outputs will include the Crop Climate Diary to assist in collecting and managing agro-met data, and the Vanuatu Climate Services for Agriculture (VaCSA) that will provide primary climate risk management solutions to the agricultural sector in Vanuatu	Professional Services Travel Technical expertise (APCC) Consultancies Workshops / Training Field work e.g. data collection IT equipment	• Salaries for APCC and VMGD personnel • Professional services for development of App and Web Portal • International travel for APCC personnel • Costs to establish field plots • Data collection costs • IT equipment for data collection and App testing • Information gathering workshops • Training sessions
Component 2: Demonstrating the value of CIS at the sectoral and community levels			
Activity 2.1.1. Investigating the climate sensitivity, potential impacts and vulnerability of food crops in Vanuatu to secure future food security	This case study will be the first of its kind in Vanuatu and will demonstrate with farmers through field trials with food crops the use of CIS to inform farm-based decisions at the sector and community levels. For example, climate information provided as 3-day and seasonal forecasts can be used to guide farmers as to when to plant certain crops, where to plant, what management practices should be applied at a particular time to reduce climate-related losses and improve productivity in crop production. The decisions made will be complementary with traditional knowledge practices since TK provides a crucial foundation for community base adaptations at the local scales.	Personnel (Agriculture Sector) Equipment Field trial costs Travel Office supplies Awareness materials Community consultations Workshops / Training	• Salary for Sector Coordinator • Travel to sites • Costs associated with establishing and maintaining plots e.g materials, seeds • Community consultations and information exchanges • Workshops and training for agricultural staff • Equipment costs for field plots

	The case study will also undertake a threshold analysis using a climate model to look at crops (food and cash crops) preferred growing conditions related to rainfall, temperature and other climate variables projected to change under future climate change. This activity will provide access to science and new knowledge on future climate risks for crops to farmers in a non-technical tool.		
Activity 2.1.2 Improving food security in Vanuatu by using climate information to prepare for and respond to temperature impacts on coastal fisheries	The fisheries sector case study will demonstrate how communities can use CIS tools to improve food security in Vanuatu to build resilience to climate variability and change. The focus will be on preparing for and responding to future marine thermal stress events (heatwaves caused by elevated sea surface temperatures; SST+) that can cause coastal and nearshore fish to migrate or die and impact coral reef habitats that support coastal fisheries, which collectively impact on food security.	Personnel (Fisheries Sector) Travel Field costs Awareness materials Equipment Consumables Community Consultations	• Salary for Sector Coordinator • Travel to sites • Costs associated with establishing storage facilities • Community consultations and information exchanges • Workshops and training for fisheries staff
Activity 2.1.3 Upgrade the standard infrastructure design in the Vanuatu Public Works Department using climate data on low–lying 'hotspot' and coastal erosion areas	The infrastructure sector case study will use data collected on rainfall, bathymetry and tidal levels for the study sites to develop a real-time flood-inundation model with future scenarios. The outputs will help PWD Engineers improve their understanding on how climate variability and change affects infrastructure at the study sites and more broadly, around the country. This climate information will be used by PWD Engineers to design structures specific for local conditions, with the goal of climate-proofing public infrastructure, such as roads and bridges. The flood model will also be used to review existing completed structures to determine whether they are climate resilient. For coastal areas, a tidal model under future projected sea level rise will generate information on the current and future design requirements for coastal infrastructure, i.e. jetties and wharfs.	Personnel (Public Works) Travel Equipment Workshops / Training Awareness materials Consumables	• Salary for Sector Coordinator • Travel to sites • Equipment costs to take surveys / mapping of infrastructure • Workshops and training for Public Works staff

	The case study will provide critical information to the PWD Engineers on the design standard for climate resilient design, monitoring and analysis and will be accompanied by training and awareness to staff at the Ministry of Public Utilities in applying the design standard.		
Activity 2.1.4 Increasing climate resilience in flood prone areas - Sarakata Flood Plain	The primary objective for the Water Sector is to demonstrate the value of tailored climate information services as outlined in the four proposed action as decision support tools and sector specific information tools. The case study primary outcome of the monitoring flood and ground water is to increase resilience to flood prone areas by supporting and educating communities with flood management/forecast, and water management for its stakeholders in Luganville. The main activities of this case study is to be concentrated on areas with flood history - Sarakata, Solway, Pepsi, and Lausvatu.	Personnel (Water Sector) Travel Equipment Community Consultations Workshops / Training Awareness materials Consumables	• Salary for Sector Coordinator • Travel to sites • Equipment costs to take surveys / mapping of water catchment • Workshops and training Sector staff • Community consultations and information sessions
Activity 2.1.5 Minimizing the impacts of climate variability and change on tourism development through supporting adaptation	The main objective of the case study is to demonstrate the use of CIS at government, sector and tourism operator level in for a strengthened and sustainable tourism business environment to the long- and short-term impacts of climate variability and change. The case study seeks to respond to the main goals of Vanuatu's Sustainable Tourism Policy and the Vanuatu Sustainable Development Plan.	Personnel (Tourism Sector) Travel Equipment Stakeholder Consultations Workshops / Training Awareness materials Consumables	• Salary for Sector Coordinator • Travel to sites • Equipment costs to take surveys / mapping of tourism • Workshops and training for tourism operators and Sector staff
Activity 2.1.6 Site Assessments	Undertake initial site assessments to develop workplans and budgets under six-month workplan (Second disbursement)	Personnel (Sectors) Travel Community consultations Workshop	• Travel to sites to undertake the initial assessments • Community consultations • Project workshops for findings – analysis etc

Activity 2.2.1 Establishing community CIS sites	The project will establish and support a Vanuatu network of community-based CIS 'champions' and Climate Centres to facilitate access and use of CIS by local communities impacted by climate 'hot spots' (e.g. communities that are subject to known climate hazards such as extreme sea level events/storm surge and coastal inundation and erosion, extreme rainfall, etc.). This activity will enhance citizen capacity at community levels for the use of CIS and integration with Traditional Knowledge to support resiliency. This will be delivered in the context of support for building capacity at the Provincial level through the Provincial 'Climate Change Community Centres', that were piloted successfully by the Finland-Pacific (FINPAC) project in the Epau community, on Efate Island.	Personnel (Community Coordinator) Personnel (Climate Champions / Vanuatu Volunteer Network) Travel Building supplies Equipment Community consultations Awareness materials Office supplies / consumables Workshops / Trainings Freight	• Employ a Community Coordinator to manage the activity and ensure integration with Project team • Establish climate centres e.g. renovations, materials and equipment • Vanuatu Volunteers Network for engagement activities • Awareness materials • CIS tools and products • Community consultations and information sessions • Office supplies e.g. stationery, materials etc • Freight for equipment and information for Centres • Travel for Coordinator and for Climate Champions / VVN
Activity 2.3.1. Undertake a socio-economic benefit analysis for Vanuatu using the customized Pacific CIS Cost-benefit Framework	Small Island Nations, their population, economic systems, infrastructure, and ecosystems are vulnerable to climate shocks to the population, economic sectors, infrastructure, and natural assets. In attempting to quantify all the costs and benefits of climate services, this Activity will take a 'triple bottom' line approach and aim to deliver three perspectives on return on investment in climate information services	Technical expertise (CSIRO) Personnel (VMGD) Travel	• Salary for CSIRO personnel • International travel for CSIRO personnel to Port Vila
Component 3: Development of CIS tools and engaging with stakeholders through outreach and communication			
Activity 3.1.1 Integrating Traditional Knowledge into CIS tools and information	By expanding and digitizing (and verifying) TK data this will support the Vanuatu Rainfall Network (VRN) to monitor TK indicators that can be incorporated into CIS tools and products. Furthermore, integrating climate science with traditional knowledge with updates on climate	Technical expertise (SPREP & BOM) Personnel (VMGD) Travel Workshops / Trainings Equipment	• Salaries for BOM personnel • Salaries for two TK officers • International travel for BOM and SPREP personnel • Workshops and trainings for Vanuatu-based personnel • Collection and analysis of TK i.e. fieldwork • Community consultations to gather information

	science and climate processes current products such as the ENSO handbook can be updated and enriched with the added value of TK and provide sector specific examples that can feed into the 'case studies' (Activity 2.1.1 – 2.1.5) and other climate information services / products. Local communities (farmers and fishers) apply a lot of traditional knowledge to their activities. To enrich the new CIS and science to be more meaningful for this audience – TK has to be incorporated into the new science CIS products. This is part of the 'tailoring' part of the work to be undertaken by the project. The outputs from this activity will inform other activities such as seasonal forecasting and be incorporated in training and workshops delivered within these. This work will also inform other activities within the project. These activities will provide a framework that can be used by VMGD to develop future CIS as well as broader communication material and facilitate stronger engagement between VMGD and Vanuatu communities.	Community consultations Awareness materials	• Awareness materials on TK & climate science (linked to CIS tools and products) • Printing of reports • Equipment e.g. digital recorder, camera, laptop etc • Registration fees
Activity 3.2.1. Developing CIS tools and information products for target end-users	On-line CIS outputs including more customized access for Decision Support System tools and processes will be developed. This will be focused on / include delivery and access, via the VMGD Warning Information Dissemination Platform, and complimentary sector specific 'Climate Watches' (as referred by the VFCS). These resources will be appropriately interfaced with the Vanuatu National Advisory Board (NAB) Portal and Vanuatu content of Pacific Climate Change Portal. This activity will support enhanced access to key project (and other) CIS products and support tools for use (in particular) by government agencies, the private sector and other development sectors.	Technical expertise (BOM) Personnel (VMGD) Travel Professional Services IT equipment Workshop / Training	• Salaries for VMGD and BOM personnel • International and local travel • Professional services for development of tools and products • IT equipment e.g. display screens • Training workshops / information sessions on CIS tools and products in Provinces

Activity 3.3.1 Knowledge management, communication and outreach	Establishes the knowledge management & communication / outreach platform for the Project, and will lead the KM, engagement and outreach activities designed to promote behaviour change, decision-making and learning amongst the Project beneficiaries. This activity will coordinate across all components and activities to build and communicate the Project's results and information outputs into appropriate formats for the audiences identified in the knowledge management, communication and outreach strategy.	Personnel (SPREP) Consultancies Professional Services Awareness materials and tools Travel IT equipment Office supplies / consumables Community activities	• Salaries for communication / knowledge management specialist • Consultancies to develop materials and information packages, work with communication specialist • Development of materials • Local travel costs • IT equipment e.g. laptop, printer • Office supplies e.g. stationery etc • Activities to be undertaken with communities as part of Citizen Science
Component 4: Strengthening the institutional capacity for long-term implementation of CIS in decision-making			
Activity 4.1.1. Strengthening CIS coordination and response mechanisms for target sectors	The review of existing Vanuatu Government policy, planning and associated institutional and governance arrangements aims to strengthen policies and institutional arrangements through the incorporation of climate information services (CIS) into national and provincial governance and sector policies and plans to support decision-making.	Consultancies Travel Workshops / Training Office supplies	• Consultancies to undertake review and develop institutional coordination mechanisms • International travel for consultants • Project committee meetings to integrate information across Sectors and strengthen CIS across Sectors • Workshops and trainings • Office supplies
Activity 4.1.2 Building institutional and project capacity in Monitoring and Evaluation, Environmental and Social Safeguards and Gender	Deliver technical assistance to government, sectors and communities to develop the sustainable use of CIS tools in sectors. Activities will gather feedback and views from the different levels (government through to stakeholders to gauge the effectiveness of the project's activities and progress to ensure the project is delivering on its objective). This activity aims to ensure the project is not only delivering on producing outputs but that it's interventions are also mobilizing the desired change within Vanuatu Government's desire for their Climate Information Service to be strengthened and to support people to be more resilient to the impacts	Technical expertise Travel Workshops / Training Data collection	• Consultancies for technical expertise on ESS, Gender and M&E i.e. develop plans, training of project staff etc • International and local travel • Workshops and trainings to understand and implement plans, and develop capacity of project team • Undertake data collection e.g. surveys etc for baselines and tracking of progress

	of climate change. It also seeks to ensure that project activities promote gender equality and is incorporating environmental and social safeguards.		
Activity 4.2.1 Training packages building knowledge and skills in meteorology and climate tools	Develop and provide technical training and opportunities for Vanuatu Government staff to develop, apply and extend their knowledge of CIS. This activity will also provide learning and training opportunities in CIS for the next generation of ni-Vanuatu meteorologists and sector workers.	Consultancy Travel Professional Services Workshops / Training	• Consultancy to develop 'train-the-trainer' package • International travel for VMGD and Sector staff to undertake training and secondments • Development of course materials and facilitation of courses
Activity 4.2.2 Establishing a mentoring programme to strengthen capacity and knowledge		Training Secondments Travel Awareness materials	• International travel for VMGD and Sector staff to undertake training and secondments

Annex II. SPREP Services Agreement

Services Agreement

Reference: [insert Agreement No.]

between

the Secretariat of the Pacific Regional Environment Programme (SPREP)

and

[insert organisation / company name]

for the provision of

[insert title of the Services]

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Details

Parties

1. **SPREP**:

Full legal name	Secretariat of the Pacific Regional Environment Programme (SPREP)
Legal entity type (e.g. individual, incorporated association, company, partnership etc)	Regional Intergovernmental Organisation
Trading or business name	As above.
Company Number or other entity identifiers	N/A

2. **Supplier**:

Full legal name	[insert]
Legal entity type (e.g. individual, incorporated association, company, partnership etc)	[insert]
Trading or business name	[insert Trading name or 'as above']
Company Number or other entity identifiers	[insert or 'Nil']

Recitals

A. SPREP requires the provision of certain services.

B. The Supplier has fully informed itself on all aspects of the work required to be performed and has represented that it has the requisite skills and experience to perform that work.

C. SPREP has agreed to engage the Supplier to provide the Services on the terms and conditions contained in this Agreement.

Agreed Terms

1. Definitions and interpretation

1.1 Definitions

In this Agreement, except where the contrary intention is expressed, the following definitions are used:

Agreed Terms	clauses 1 to 26 of this Agreement which set out terms and conditions agreed by the parties.
Agreement	this agreement between SPREP and the Supplier, as amended from time to time in accordance with clause 26.2, and includes its Schedules and any attachments.
Agreement Details	the details set out in Schedule 1.
Agreement Material	any Material that is created by the Supplier for the purpose of or as a result of performing its obligations under this Agreement and includes any modifications that may be required under clause 10.6(b).
Agreement Period	the Initial Agreement Period plus any Option Period exercised in accordance with clause 3.2.
Business Day	in relation to the doing of any action in a place, any day other than a Saturday, Sunday or public holiday in that place. A Business Day starts at 8.30am and ends at 5pm.
Commencement Date	the date on which this Agreement commences, as specified in Item 5 of the Agreement Details.
Confidential Information	information that is by its nature confidential; and (a) is designated by a party as confidential; or (b) a party knows or ought to know is confidential, but does not include: (c) information which is or becomes public knowledge other than by breach of this Agreement or any other confidentiality obligation.
Conflict of Interest	any circumstance in which the Supplier or any of the Supplier's Personnel has an interest (whether financial or non-financial) or an affiliation that is affecting, will affect, or could be perceived to affect, the Supplier's ability to perform the Services, or its obligations under this Agreement, fairly and independently.
Deliverable	any Agreement Material or other item to be supplied by the Supplier under this Agreement.
Donor	the donor country or multilateral institution with primary funding responsibility for the project, programme or activity under which the Services are to be delivered.

End Date	the date specified in Item 6 of the Agreement Details or the conclusion of the last Option Period, as exercised (if any).
Expert	(a) the financial or legal experts of a party; and (b) the respective officers and employees of those financial or legal experts.
Fees	the fees payable to the Supplier in accordance with Schedule 3.
Initial Agreement Period	the period of time for which this Agreement is intended to continue, as specified in clause 3.1.
Intellectual Property Rights	all intellectual property rights, including the following rights: (a) copyright, patents, rights in circuit layouts, trademarks, designs, trade secrets, know how, domain names and any right to have confidential information kept confidential; (a) any application or right to apply for registration of any of the rights referred to in paragraph (a); and (b) all rights of a similar nature to any of the rights in paragraphs (a) and (b) which may subsist in Samoa or elsewhere, whether or not such rights are registered or capable of being registered.
Item	an item in a Schedule to this Agreement.
Law	any applicable statute, regulation, by-law, ordinance or subordinate legislation in force from time to time in Samoa and / or in any State or territory in which the Services are to be undertaken.
Losses	liabilities, expenses, losses, damages and costs (including but not limited to legal costs on a full indemnity basis, whether incurred by or awarded against a party).
Material	any software, firmware, documented methodology or process, documentation or other material in whatever form, including without limitation any reports, specifications, business rules or requirements, user manuals, user guides, operations manuals, training materials and instructions, data, metadata and the subject matter of any category of Intellectual Property Rights.
Milestone	any agreed date to be met by the Supplier in performing any of its obligations under this Agreement, as specified in the Statement of Work.
Milestone Payment	a payment of an amount set out in Item 3 of Schedule 3 in respect of a Milestone.

Modify	means to add to, enhance, reduce, change, replace, vary or improve. Derivatives such as **Modification** and **Modified** have corresponding meanings.
Moral Rights	the right of integrity of authorship (that is, not to have a work subjected to derogatory treatment), the right of attribution of authorship of a work, and the right not to have authorship of a work falsely attributed.
Option Period	a period of time by which this Agreement may be extended as specified in clause 3.2 and Item 7 of the Agreement Details.
Performance Criteria	the requirements (if any) set out in the Statement of Work for each Service and Deliverable.
Personal Information	Personal information is any piece of information that relates to a living, identifiable human being or an opinion about an identified individual, or an individual who is reasonably identifiable: (a) Whether the information or opinion is true or not; and (b) whether the information or opinion is recorded in a material form or not.
Personnel	in relation to a party, any natural person who is an employee, officer, agent or professional expert of that party or, in the case of the Supplier, of a subcontractor.
Pre-existing Material	any Material, other than Agreement Material or Third Party Material, which is created before the Commencement Date and made available by a party for the purpose of this Agreement, on or following the Commencement Date, and includes: (a) error corrections or translations to that Material; and (b) modifications or derivatives of that Material where such modification or derivative work cannot be used without infringing the Intellectual Property Rights in the underlying Material.
Schedule	a schedule to this Agreement.
Security Incident	any incident or breach of security that may impact: (a) the Supplier's ability to deliver the Services; or (b) SPREP Material which is held by, or in transit to and / or from, the Supplier.
Services	the services to be provided by the Supplier, as specified in the Statement of Work and include the supply of the Deliverables.

Specified Acts	(a) failing to attribute or falsely attributing the authorship of any Agreement Material, or any content in the Agreement Material; (b) materially altering the style, format, colours, content or layout of the Agreement Material and dealing in any way with the altered Agreement Material; (c) reproducing, communicating, adapting, publishing or exhibiting any Agreement Material; and (d) adding any additional content or information to the Agreement Material.
Specified Personnel	the Supplier's Personnel specified in Item 11 of the Agreement Details.
SPREP Data	all data and information relating to SPREP, and its operations, facilities, customers, Personnel, assets and programs (including Personal Information) in whatever form that information may exist and whether entered into, stored in, generated by or processed through software or equipment by or on behalf of SPREP
SPREP Material	any Material provided to the Supplier by SPREP.
SPREP Representative	the person identified in Item 2 of the Agreement Details. The SPREP Representative is responsible for managing the Agreement, including: (a) Managing the relationship between the Parties (b) Overseeing the effective implementation of this Agreement (c) Act as a first point of contact for any issues that arise, (d) Promptly notify the Supplier Representative if the SPREP Representative changes, and (e) To address and resolve any issues in a prompt manner.
Statement of Work	the details of the Services to be performed under this Agreement, as set out in Schedule 2.
Supplier	the party specified in Item 3 of the Agreement Details and includes its Personnel.

Supplier Representative	the person identified in Item 4 of the Agreement Details. The Supplier Representative is responsible for managing the Agreement, including: (a) Managing the relationship between the Parties (b) Overseeing the effective implementation of this Agreement (c) Act as a first point of contact for any issues that arise, (d) Promptly notify the SPREP Representative if the Supplier Representative changes, and (e) To address and resolve any issues in a prompt manner.
Tax	(a) any tax, withholding tax, charge, rate, duty (including stamp duty and customs duty), impost, excise, tax by whatever name called and whether Samoan, foreign, state, municipal, provincial, county or local; and (b) any interest, charge, penalty, fee, fine or other amount of any kind assessed, charged or imposed on or in respect of the above.
Third Party Material	Material created by a third party that is: (a) included, embodied in or attached to the Agreement Material; or (b) used for the purpose of, or as a result of, the Supplier's performance of its obligations under this Agreement.
Warranted Materials	the Pre-existing Material and Third Party Material provided by the Supplier, the Deliverables and Agreement Material.

1.2 Interpretation

In this Agreement, except where the contrary intention is expressed:

(a) the singular includes the plural and vice versa, and a gender includes other genders;

(b) another grammatical form of a defined word or expression has a corresponding meaning;

(c) a reference to a clause, paragraph, Schedule or annexure is to a clause or paragraph of, or Schedule or annexure to, this Agreement, and a reference to this Agreement includes any Schedule or annexure;

(d) a reference to a document or instrument includes the document or instrument as novated, altered, supplemented or replaced from time to time and any schedules, appendices or annexures to that document or instrument;

(e) a reference to USD, US$, $US, dollar or $ is to United States currency;

(f) a reference to time is to the time in the place where the obligation is to be performed;

(g) a reference to a party is to a party to this Agreement, and a reference to a party to a document includes the party's executors, administrators, successors and permitted assignees and substitutes;

(h) a reference to a person includes a natural person, partnership, body corporate, association, governmental or local authority or agency or other entity;

(i) if the Supplier is a trustee, the Supplier enters this Agreement personally and in its capacity as trustee and warrants that it has the power to perform its obligations under this Agreement;

(j) a reference to a statute, ordinance, code or other Law includes regulations and other instruments under it and consolidations, amendments, re-enactments or replacements of any of them;

(k) the meaning of general words is not limited by specific examples introduced by including, for example or similar expressions;

(l) any agreement, representation, warranty or indemnity by two or more parties (including where two or more persons are included in the same defined term) binds them jointly and severally;

(m) any agreement, representation, warranty or indemnity in favour of two or more parties (including where two or more persons are included in the same defined term) is for the benefit of them jointly and severally; and

(n) a rule of construction does not apply to the disadvantage of a party because the party was responsible for the preparation of this Agreement or any part of it.

2. Priority of Agreement documents

If there is inconsistency between any of the documents forming part of this Agreement, those documents will be interpreted in the following order of priority to the extent of any inconsistency:

(a) Agreed Terms;

(b) the Schedules in their order of appearance;

(c) any attachments to the Schedules; and

(d) documents incorporated by reference in this Agreement.

3. Duration of Agreement

3.1 Initial Agreement Period

Subject to clause 3.2, this Agreement begins on the Commencement Date and continues until the End Date unless terminated earlier in accordance with this Agreement (**Initial Agreement Period**).

3.2 Option to extend Initial Agreement Period

(a) The Initial Agreement Period may be extended by SPREP for further period(s), specified in Item 7 of the Agreement Details (each an **Option Period**), on the terms and conditions then in effect, by giving written notice to the Supplier. Such

notice must be given at least 30 days before the end of the then current Agreement Period.

(b) Any extension exercised in accordance with this clause takes effect from the end of the then current Agreement Period.

4. General obligations of the parties

The parties will, at all times:

(a) act reasonably in performing their obligations and exercising their rights under this Agreement;

(b) diligently perform their respective obligations under this Agreement; and

(c) work together in a collaborative manner.

5. Provision of Services

5.1 Service obligations

The Supplier must supply the Services:

(a) so that they are fit for purpose, complete and accurate;

(b) so that any materials that the Supplier incorporates are free from defects in design, performance and workmanship;

(c) with due skill and care and in accordance with relevant best practice including complying with all applicable industry standards and guidelines or where none apply, relevant International Standards, best practice and guidelines, including any specified in Item 8 of the Agreement Details;

(d) Any Information that is produced or reproduced in an electronic format, the Supplier must deliver it to SPREP in a format approved by SPREP.

(e) where appropriate, in accordance with SPREP's policies and specific requirements (if any) specified in Item 9 of the Agreement Details;

(f) in accordance with any reasonable directions given by SPREP from time to time, including through the submission of written reports or information on any aspects of the Agreement requested by SPREP's Representative;

(g) so that where materials are produced or reproduced in an electronic format, they are delivered to SPREP in a format approved by SPREP;

(h) to the extent applicable, in compliance with SPREP's Values and Code of Conduct https://www.sprep.org/attachments/Publications/Corporate_Documents/sprep-organisational-values-code-of-conduct.pdf

(i) so as to meet the Milestones and other project plan requirements, and where no Milestones or project plan requirements are specified, promptly and without delay;

(j) in accordance with the Performance Criteria (if any);

(k) using the Specified Personnel (if any);

(l) in accordance with all applicable Laws; and

(m) otherwise in accordance with the provisions of this Agreement.

5.2 Evidence of certification

The Supplier must, on request by SPREP, provide SPREP with evidence of certifications and other records confirming compliance with all applicable standards, including any specified in Item 8 of the Order.

5.3 Supplier warranties

The Supplier represents and warrants that:

(a) it has the right to enter into this Agreement;

(b) it has all rights, title, licences, interests and property necessary to lawfully perform the Services;

(c) it and its Personnel, including its Specified Personnel, have the necessary experience, skill, knowledge and competence to perform the Services and (where appropriate) will hold such licences, permits or registrations as are required under any applicable Laws to provide the Services;

(d) the Services will be provided in accordance with the commitments made in clause 5.1;

(e) no litigation, arbitration, mediation, conciliation or administrative proceedings are taking place, pending, or to the knowledge of any of its officers after due inquiry, are threatened which, if adversely decided, could have an adverse effect on the Supplier's ability to perform its obligations under this Agreement; and

(f) all insurance policies required to be held by the Supplier under this Agreement:

(i) will remain in effect as provided for in this Agreement; and

(ii) will not be varied by the Supplier without SPREP’s written consent.

5.4 Access to SPREP's premises

SPREP must cooperate with the Supplier by providing access to its premises and facilities as reasonably necessary to enable the Supplier to provide the Services.

5.5 Conduct at SPREP's premises

Without limiting clause 17, the Supplier must, if using or accessing SPREP's premises or facilities, comply with all reasonable directions and procedures relating to work health and safety and security in operation at those premises or facilities whether specifically drawn to the attention of the Supplier or as might reasonably be inferred from the circumstances.

5.6 Subcontracting

(a) The Supplier must:

(i) not subcontract any aspect of the provision of the Services other than to those entities set out in Item 10 of the Agreement Details without the prior written approval of SPREP, which will not be unreasonably withheld;

(ii) ensure that any subcontractor approved under this Agreement complies with all applicable Laws and:

(A) clause 5.7 (Work health and safety);

(B) clause 10 (Intellectual Property Rights);

(C) clause 13 (Insurance);

(D) clause 14 (Confidentiality and privacy);

(E) clause 15 (Protection of Personal Information);

(F) clause 16 (Conflict of Interest);

(G) clause 17 (Security);

(H) clause 18 (Books and records);

(I) clause 19 (Audit and access); and

(b) The Supplier is fully responsible for the performance of the Services even if the Supplier subcontracts any aspect of the provision of the Services.

(c) The Supplier:

(i) must on request by SPREP provide SPREP with the names of any of the Supplier's subcontractors;

(ii) agrees that SPREP may disclose publicly the names of any of the Supplier's subcontractors; and

(iii) must ensure that any subcontractor agrees that SPREP may disclose the subcontractor's name publicly.

(d) If requested by SPREP, the Supplier must promptly provide to SPREP a copy of any contract relating to the Services and/or any Material relating to the engagement of the subcontractor.

5.7 Work health and safety;

(a) Work Health and Safety refers to the legal responsibility the Supplier has to manage health and safety of employees and sub-contractors whilst engaged by SPREP.

(b) The Supplier must in carrying out its obligations under this Agreement, comply, and use reasonable endeavours to ensure that its subcontractors comply, with the provisions of all relevant statutes, regulations, by-laws and requirements of any relevant authority including those arising under a WHS law in respect of occupational health and safety.

(c) The Supplier must, in carrying out its obligations under this Agreement, comply, and use reasonable endeavours to ensure that its subcontractors comply, with any of SPREP’s work, health and safety policies as notified, referred to, or made available, from time to time by SPREP to the Supplier in writing.

(d) If the Supplier is required by a WHS law to report to a regulator an incident arising out of the provision of the Services:

(i) at the same time, or as soon as is possible in the circumstances, the Supplier must give notice of such incident, and a copy of any written notice provided to a regulator, to SPREP; and

(ii) the Supplier must provide to SPREP, within such time as is specified by SPREP, a report detailing the circumstances of the incident, the results of investigations into its cause, and any recommendations or strategies for prevention in the future.

(e) The Supplier must inform SPREP of the full details of:

(i) any suspected contravention of a WHS law relating to the provision of the Services, within 24 hours of becoming aware of any such suspected contravention;

(ii) any cessation or direction to cease work relating to the provision of the Services, due to unsafe work, immediately upon the Supplier being informed of any such cessation or direction;

(iii) any workplace entry by a WHS entry permit holder, or an inspector, to any place where the Services are being performed or undertaken, within 24 hours of becoming aware of any such workplace entry; and

(iv) any proceedings against the Supplier or its officers, or any decision or request by the Regulator given to the Supplier or its Personnel, under a WHS law, within 24 hours of becoming aware of any such proceedings, decision or request.

5.8 Co-operation with Personnel and contractors

The Supplier must in the performance of the Services under this Agreement:

(a) fully co-operate with SPREP's Personnel and other contractors; and

(b) use its best efforts to coordinate its activities so as to support and facilitate, in SPREP's best interests, the timely and efficient completion of all work and other activities to be performed for SPREP by any person.

6. Monitoring progress

6.1 Progress meetings

The parties will meet at the times set out in the Statement of Work (or otherwise as agreed in writing between the parties) to discuss any issues in relation to the provision of the Services. The Supplier must ensure that the Supplier Representative and SPREP must ensure SPREP's Representative is reasonably available to attend such meetings and answer any queries relating to the provision of the Services raised by either party.

6.2 Reporting

The Supplier must provide SPREP with reports in accordance with the Statement of Work.

7. Performance assessment

7.1 Assessment of Services

Without limiting any other obligation of the Supplier, each element of the Services is subject to assessment by SPREP against the relevant Performance Criteria (if any).

Where no Performance Criteria are specified in the Statement of Work, SPREP will, acting reasonably, assess the effectiveness of the Supplier's delivery of the Services against clause 5.1.

7.2 Notice of non-compliant Services

If SPREP considers that all or part of the Services do not meet the Performance Criteria, SPREP may provide the Supplier notice of that fact and include reasons for the Services not meeting the Performance Criteria.

7.3 Rectification of non-compliant Services

If SPREP notifies the Supplier that all or part of the Services do not meet the Performance Criteria, the Supplier must:

(a) within five Business Days after the date of receipt of the notice or such other time as agreed between the parties in writing:

(i) take all necessary steps to ensure that the Services are promptly corrected;

(ii) give notice to SPREP when the Services have been corrected; and

(b) following compliance with clause 7.3(a), allow SPREP to repeat the assessment of all or part of the Services against the Performance Criteria until it is satisfied that the Performance Criteria are met.

7.4 Other rights

Clauses 7.2 and 7.3 do not limit in any way any other right, remedy or recourse of SPREP.

8. Personnel

8.1 Use of Specified Personnel

The Supplier must:

(a) provide the Services or any part of the Services to which their particular expertise relates, with the active involvement of, and using the expertise of the Specified Personnel; and

(b) ensure that each of the Specified Personnel is aware of and complies with the Supplier's obligations in providing the Services.

8.2 If the Specified Personnel are not available

(a) Where one or more of the Specified Personnel is or will become unable or unwilling to be involved in providing the Services, the Supplier must notify SPREP immediately.

(b) The Supplier must:

(i) if requested by SPREP, provide a replacement person of suitable ability and qualifications at no additional charge and at the earliest opportunity; and

(ii) obtain SPREP's written consent prior to appointing any such replacement person. SPREP's consent will not be unreasonably withheld.

8.3 SPREP may request replacement of Personnel

(a) SPREP may at any time request the Supplier to remove from work in respect of this Agreement any of the Specified Personnel or the Supplier's Personnel.

(b) On receipt of a request under clause 8.3(a), the Supplier must promptly arrange for the removal of such Personnel and their replacement in accordance with the process outlined in clause 8.2.

9. SPREP Material

SPREP will provide to the Supplier SPREP Material and the Supplier must ensure that SPREP Material is used strictly in accordance with any conditions or restrictions specified in Item 12 of the Agreement Details and any direction by SPREP.

10. Intellectual Property Rights

10.1 Pre-existing Material of the Supplier

(a) This clause 10 does not affect the ownership of the Intellectual Property Rights in any Pre-existing Material of the Supplier.

(b) The Supplier grants to SPREP, a perpetual, irrevocable, world-wide, royalty free, non-exclusive licence (including the right to novate or assign the licence, and to sublicense) to use, reproduce, adapt, Modify and communicate the Pre-existing Material of the Supplier in order for SPREP to obtain the full benefit of the Services.

10.2 Third Party Material

(a) The Supplier must provide Third Party Material necessary or appropriate to supply the Services.

(b) Before using any Third Party Material the Supplier must procure for SPREP perpetual licences enabling SPREP to use the Third Party Material:

(i) to the extent necessary to obtain the full benefit of the Services; and

(ii) from the expiry or termination of this Agreement, to maintain the Deliverables or engage a third party to maintain the Deliverables.

(c) If the Supplier cannot obtain the licences as described in clause 10.2(b), the Supplier must:

(i) notify SPREP of the best alternative licence terms for that Third Party Material and not use that Third Party Material unless SPREP consents to those terms; and

(ii) if SPREP does not consent under clause 10.2(c)(i) notify SPREP of any comparable Third Party Material and comply with its obligations under this clause 10.2 in respect of comparable Third Party Material.

10.3 SPREP ownership of Intellectual Property Rights in Agreement Material

(a) All Intellectual Property Rights in the Agreement Material vest in SPREP on creation.

(b) SPREP may, at its discretion, make all Agreement Material available for use by the public under the Creative Commons Licence.

10.4 Licence of SPREP Material and Agreement Material to Supplier

(a) To the extent that the Supplier needs to use any of SPREP Material or Agreement Material for the purpose of performing its obligations under this Agreement, SPREP grants to the Supplier, subject to any direction given by SPREP, a royalty-free, non-exclusive, non-transferable licence to use, reproduce, adapt, Modify and communicate such Material solely for the purpose of providing the Services.

(b) Where the Supplier wishes to use any Agreement Material otherwise than for the purpose of providing the Services, it may only do so:

(i) with the express written permission from SPREP; and

(ii) at the Supplier's own cost.

10.5 Warranty

The Supplier warrants that:

(a) the Warranted Materials and SPREP's use of the Warranted Materials will not infringe the Intellectual Property Rights of any person;

(b) it has the necessary rights to vest the Intellectual Property Rights and grant the licences as provided for in this clause 10; and

(c) the rights conferred under clauses 10.1(b) and 10.2(b) above, are sufficient to allow SPREP to licence Agreement Material under the Creative Commons Licence, should it elect, at its absolute discretion, to do so.

10.6 Remedy for breach of warranty

If someone claims, or SPREP reasonably believes that someone is likely to claim, that all or part of the Warranted Materials infringe their Intellectual Property Rights, the Supplier must, in addition to the indemnity under clause 12 and to any other rights that SPREP may have against it, promptly, at the Supplier's expense:

(a) use its best efforts to secure the rights for SPREP to continue to use the affected Warranted Materials free of any claim or liability for infringement; or

(b) replace or modify the affected Warranted Materials so that the Warranted Materials or the use of them does not infringe the Intellectual Property Rights of any other person without any degradation of the performance or quality of the affected Warranted Materials.

10.7 Delivery of Agreement Material

On the expiry or termination of this Agreement or on such earlier date as may be specified by SPREP, the Supplier must deliver to the SPREP Representative all Agreement Material.

11. Payment

11.1 Obligation to pay Fees

Subject to this clause and the Services meeting the Performance Criteria, SPREP must pay to the Supplier the Fees as set out in

Schedule 3.

11.2 Supplier to provide invoice

The Supplier must provide a correctly rendered invoice to SPREP for the Fees in accordance with the requirements specified in Schedule 3.

11.3 Due date for payment

SPREP must make payment of a correctly rendered invoice within 28 days after receiving the invoice. If this period ends on a day that is not a Business Day, payment is due on the next Business Day.

11.4 Incorrect invoices and under / over payment

If an invoice is found to have been rendered incorrectly after payment, any underpayment or overpayment will be recoverable by or from the Supplier, as the case may be, and, without limiting recourse to other available means, may be offset against any amount subsequently due by SPREP to the Supplier under this Agreement.

11.5 Expenses

(a) Unless specified otherwise in Schedule 3, the Supplier must not charge SPREP for any disbursements, charges or expenses (including travel and accommodation, document reproduction, transportation and courier charges, and telecommunications charges) in addition to the Fees.

(b) Subject to clause (a), SPREP is under no obligation to pay any amount in excess of the Fees.

11.6 Cost changes at Supplier's risk

The Supplier must not claim any payment for any additional amounts based on changes in labour, materials or other resourcing costs, exchange rate changes or any other changes to the costs incurred by the Supplier in acquiring the inputs it requires to provide the Services.

11.7 Tax

Unless expressly specified otherwise in this Agreement:

(a) all amounts payable, consideration provided or monetary limits in this Agreement are inclusive of any Tax; and

(b) the Supplier must not charge SPREP any additional amount in connection with any Tax.

12. Indemnity and release

12.1 Indemnity by the Supplier

Subject to clause 12.3, the Supplier indemnifies SPREP and continues to indemnify SPREP against, all:

(a) Losses suffered or incurred by SPREP, including as the result of any claim made in relation to:

  (i) loss of or damage to third party property; or

  (ii) the injury, illness or death of a third party;

(b) loss of or damage to SPREP's property; or

(c) Losses suffered or incurred by SPREP in dealing with any claim against SPREP, including legal costs and expenses on a solicitor / own client basis and the cost of time spent, resources used, or disbursements paid by SPREP,

arising from:

(d) any negligent, unlawful or wilful misconduct, default or omission by the Supplier (including any of its Personnel) in connection with this Agreement;

(e) any breach by the Supplier (including any of its Personnel) of its obligations or warranties under this Agreement;

(f) any use or disclosure by the Supplier (including its Personnel) of Personal Information or Confidential Information (or both, as the case may be) held or controlled in connection with this Agreement; or

(g) an allegation that any Warranted Materials (including the use of any Warranted Materials by SPREP or its subcontractors or Personnel) infringe the Intellectual Property Rights or Moral Rights of the third party.

12.2 Release

Subject to clause 12.3, the Supplier releases SPREP from all claims, actions, demands and proceedings which it may have, or claim to have, or but for this release might have had, against SPREP in any way connected with the Supplier's performance of this Agreement or delivery of the Services.

12.3 Proportional reduction of liability

The liability of a party (**Party A**) for any Losses incurred by another party (**Party B**) will be reduced proportionately to the extent that any negligent act or omission of Party B (or of its subcontractors or Personnel) contributed to those Losses, regardless of whether legal proceedings are brought by Party A for negligence or breach of contract.

13. Insurance

13.1 Obligation to take out and maintain insurance

The Supplier must have and maintain for the period specified in clause 13.2(a) or clause 13.2(b) (as the case may be):

(a) workers' compensation insurance as required by Law; and

(b) public liability insurance; and

(c) professional indemnity or errors and omissions insurance;

as specified in Item 13 of the Agreement Details.

13.2 Insurance period

(a) If the Supplier takes out a 'claims made' policy, which requires all claims and any fact situation or circumstance that might result in a claim to be notified within the period of insurance, the Supplier must maintain the policy (or a policy in like terms) during the Agreement Period and for a period of 1 year on and from the expiry or the early termination of this Agreement – unless otherwise specified under item 13 of Schedule 1.

(b) If the Supplier takes out an 'occurrence' policy, which requires the circumstances to which a claim relates to occur during the period of insurance whilst the notification of event can occur at any time subsequently, the Supplier must maintain the policy during the Agreement Period.

13.3 Subcontractors

The Supplier must ensure that any subcontract entered into by the Supplier in relation to this Agreement places on the subcontractor, in respect of the subcontractor's

activities, the same or similar obligations about insurances, as this clause 13 places on the Supplier.

13.4 Copies of insurance

The Supplier must, on request, promptly provide to SPREP any relevant insurance policies and certificates of currency for inspection.

14. Confidentiality and privacy

14.1 Confidential Information not to be disclosed

(a) Subject to clause 14.2, a party must not, without the prior written consent of the other party, disclose any Confidential Information of the other party to a third party.

(b) In giving written consent to the disclosure of Confidential Information, a party may impose such conditions as it thinks fit, and the other party agrees to comply with these conditions.

(c) For the avoidance of doubt, it is not a breach of the obligations under this clause 14 to the extent that Confidential Information is shared by SPREP:

(i) within SPREP's organisation;

or

(ii) with Experts of SPREP,

where this serves SPREP's legitimate interests.

14.2 Exceptions to obligations

The obligations on the parties under this clause 14 will not be taken to have been breached to the extent that Confidential Information is:

(a) disclosed by a party to its Experts in order to comply with obligations, or to exercise rights, under this Agreement;

(b) required by Law to be disclosed; or

(c) in the public domain otherwise than due to a breach of this clause 14.

14.3 Obligations on disclosure

Where a party discloses Confidential Information to another person:

(a) pursuant to clauses 14.1(c) or 14.2(a), the disclosing party must:

(i) notify the receiving person that the information is Confidential Information; and

(ii) not provide the information unless the receiving person agrees to keep the information confidential.

14.4 Period of confidentiality

The obligations under this clause 17 continue, notwithstanding the expiry or termination of this Agreement:

(a) in relation to an item of information described in Item 14 of the Agreement Details, for the period set out in Item 14 in respect of that item; and

(b) in relation to any Additional Confidential Information for the purposes of this Agreement, for the period agreed by the parties in writing in respect of that information.

14.5 Confidential provisions

Notwithstanding any other provision of this Agreement, SPREP may disclose the provisions of this Agreement.

15. Protection of Personal Information

15.1 Application of the clause

This clause applies only where the Supplier deals with Personal Information when, and for the purpose of, providing the Services under this Agreement.

15.2 Obligations

The Supplier must:

(a) Use or disclose Personal Information only for the purposes of this Agreement;

(b) For all data collected there should be a stated purpose;

(c) Information collected from an individual cannot be disclosed to other organisations or individuals unless specifically authorised by law or by consent of the individual;

(d) Records kept on an individual should be accurate and up to date;

(e) There should be mechanisms for individuals to review data about them, to ensure accuracy. This may include periodic reporting;

(f) Data should be deleted when it is no longer needed for the stated purpose;

(g) Transmission of personal information to locations where "equivalent" personal data protection cannot be assured is prohibited;

(h) Acknowledge that some data is too sensitive to be collected, unless there are extreme circumstances (e.g., sexual orientation, religion) which must be approved in writing by SPREP before such data is collected;

and, where there is access to Personal Information the Supplier must:

(i) comply with the obligations under this clause 15.2;

(j) allow SPREP to undertake, and cooperate with any audit or investigation which SPREP deems necessary to verify that the Supplier is complying with these obligations.

(k) promptly notify SPREP if it fails to comply the obligations under this clause 15 or if it becomes aware of any actual or threatened disclosure of or unauthorised access to Personal Information.

15.3 Subcontracts

The Supplier must ensure that any subcontract entered into for the purpose of fulfilling its obligations under this Agreement contains provisions to ensure that the subcontractor has the same awareness and obligations as the Supplier has under this clause 15, including the requirement in relation to subcontracts.

15.4 Indemnity

The Supplier indemnifies SPREP in respect of any Loss suffered or incurred by SPREP which arises directly or indirectly from a breach of any of the obligations of the Supplier under this clause 15, or a subcontractor under the subcontract provisions referred to in clause 15.3.

16. Conflict of Interest

16.1 Warranty that there is no Conflict of Interest

The Supplier warrants that, to the best of its knowledge after making diligent inquiry, at the date of signing this Agreement no Conflict of Interest exists or is likely to arise in the performance of its obligations under this Agreement.

16.2 Notification of a Conflict of Interest

If, during the performance of the Services a Conflict of Interest arises, or appears likely to arise, the Supplier must:

(a) notify SPREP immediately in writing;

(b) make full disclosure of all relevant information relating to the Conflict of Interest and setting out the steps the Supplier proposes to take to resolve or otherwise deal with the Conflict of Interest; and

(c) take such steps as SPREP reasonably requires to resolve or otherwise deal with the Conflict of Interest.

17. Security

17.1 Security Incidents

(a) The Supplier must report to SPREP any actual or suspected Security Incident within five Business Days of the actual or suspected Security Incident.

18. Books and records

18.1 Supplier to keep books and records

The Supplier must:

(a) keep and require its subcontractors to keep comprehensive, accurate and adequate books and records, where appropriate in accordance with International Accounting Standards, in sufficient detail to enable the amounts payable by SPREP under this Agreement to be determined; and

(b) retain and require its subcontractors to retain all books and records relating to the Services for a period of seven years after termination or expiration of this Agreement.

19. Audit and access

19.1 Right to conduct audits

SPREP or a representative may conduct audits relevant to the performance of the Supplier's obligations under this Agreement. Audits may be conducted of:

(a) the Supplier's operational practices and procedures as they relate to this Agreement;

(b) the Supplier’s compliance with all applicable standards, including gathering evidence of relevant certifications;

(c) the accuracy of the Supplier’s invoices and reports in relation to the provision of the Services under this Agreement;

(d) Material (including books and records) in the possession of the Supplier relevant to the Services or this Agreement; and

(e) any other matters determined by SPREP to be relevant to the Services or this Agreement.

19.2 Access by SPREP

(a) SPREP may, at reasonable times and on giving reasonable notice to the Supplier:

(i) require the provision by the Supplier or its Personnel of records and information in a data format and storage medium accessible by SPREP; and

(ii) require assistance in respect of any inquiry into or concerning the Services or this Agreement. For these purposes an inquiry includes any administrative or statutory review, audit or inquiry (whether within or external to SPREP).

19.3 No reduction in responsibility

The requirement for, and participation in, audits does not in any way reduce the Supplier's responsibility to perform its obligations in accordance with this Agreement.

19.4 Subcontractor requirements

The Supplier must ensure that any subcontract entered into for the purpose of this Agreement contains an equivalent clause granting the rights specified in this clause.

20. Fraud

20.1 Compliance with Fraud Control Guidelines

(a) The Supplier must notify SPREP immediately if it knows or has reason to suspect that any fraud has occurred or is occurring or is likely to occur in relation to this Agreement (including by the Supplier or its Personnel).

21. Unforeseen events

21.1 Occurrence of unforeseen event

Subject to clause 21.2, a party (**Affected Party**) is excused from performing its obligations under this Agreement to the extent it is prevented by circumstances beyond its reasonable control (other than lack of funds for any reason or any strike, lockout and labour disputes in respect of the Supplier only), including but not limited to acts of God, pandemic, natural disasters, acts of war, riots and strikes outside that party's organisation.

21.2 Notice of unforeseen event

When the circumstances described in clause 21.1 arise or are reasonably perceived by the Affected Party as an imminent possibility, the Affected Party must give notice of those circumstances to the other party as soon as possible, identifying the effect they will have on its performance. An Affected Party must make all reasonable efforts to minimise the effects of such circumstances on the performance of this Agreement.

21.3 Termination

If non-performance or diminished performance by the Affected Party due to the circumstances under clause 21.1 continues for a period of more than 3 consecutive

months, the other party may terminate this Agreement immediately by giving the Affected Party written notice.

21.4 Consequences of termination

If this Agreement is terminated under clause 21.3:

(a) each party will bear its own costs and neither party will incur further liability to the other; and

(b) where the Supplier is the Affected Party, it will be entitled to payment for Services accepted or work performed prior to the date of intervention of the circumstances described in clause 21.1.

22. Dispute resolution

22.1 No arbitration or court proceedings

If a dispute arises in relation to the conduct of this Agreement (**Dispute**), a party must comply with this clause 22 before starting arbitration or court proceedings.

22.2 Notification

A party claiming a Dispute has arisen must give the other parties to the Dispute notice setting out details of the Dispute.

22.3 Parties to resolve Dispute

(a) During the period of 14 days after notification of a Dispute is given under clause 22.2 (or longer period if the parties agree in writing) the parties shall attempt to resolve the Dispute by negotiation at the officer level.

(b) If the parties cannot resolve the Dispute at the officer level within that period, each party to the Dispute must use its reasonable efforts through a meeting of CEOs, agency heads, or equivalent level, to resolve the Dispute.

(c) If the parties cannot resolve the Dispute within 14 days at the CEO, agency head or equivalent level, they must refer the Dispute to a mediator if one of them requests.

22.4 Appointment of mediator

If the parties to the Dispute cannot agree on a mediator within seven days after a request under clause 22.3 the matter will be referred to the President of the Samoa Law Society to appoint one.

22.5 Role of mediator and obligations of parties

The role of a mediator is to assist in negotiating a resolution of the Dispute. A mediator may not make a binding decision on a party to the Dispute except if the party agrees in writing. Unless agreed by the mediator and parties, the mediation must be held within 21 days of the request for mediation in clause 22.3. The parties must attend the mediation and act in good faith to genuinely attempt to resolve the Dispute.

22.6 Costs

Each party to a Dispute must pay its own costs of complying with this clause 22. The parties to the Dispute must equally pay the costs of any mediator.

22.7 Termination of process

A party to a Dispute may terminate the dispute resolution process by giving notice to each other party after it has complied with clauses 22.1 to 22.5. Breach of this clause

If a party to a Dispute breaches any of clauses 22.1 to 22.7, the other party does not have to comply with those clauses in relation to the Dispute.

22.8 Obligations continue

(a) Despite the existence of a Dispute, the parties must continue to perform their obligations under this Agreement, unless a direction is issued in accordance with clause 22.8(b).

(b) If directed and notified in writing by SPREP to do so, the Supplier must cease performing the obligations of the Supplier under this Agreement which are specified in SPREP's notice until SPREP issues a further written notice to the Supplier directing it to resume performance of those obligations.

23. Termination

23.1 Termination and reduction for convenience

(a) SPREP may, at any time, by notice, terminate this Agreement or reduce the scope of the Services.

(b) On receipt of a notice of termination or reduction the Supplier must:

(i) stop work as specified in the notice;

(ii) take all available steps to minimise loss resulting from that termination and to protect SPREP Material and Agreement Material; and

(iii) continue work on any part of the Services not affected by the notice.

(c) If this Agreement is terminated under this clause 23.1, SPREP is liable only for:

(i) payments under clause 11 for Services rendered before the effective date of termination; and

(ii) reasonable costs incurred by the Supplier and directly attributable to the termination.

(d) If the scope of the Services is reduced, SPREP's liability to pay the Fees or to provide SPREP Material abates in accordance with the reduction in the Services.

(e) SPREP is not liable to pay compensation under clause 23.1(c)(ii) in an amount which would, in addition to any amounts paid or due, or becoming due, to the Supplier under this Agreement, exceed the total Fees payable under this Agreement.

(f) The Supplier is not entitled to compensation for loss of prospective profits.

23.2 Termination by SPREP for default

(a) Without limiting any other rights or remedies SPREP may have against the Supplier arising out of or in connection with this Agreement, SPREP may terminate this Agreement effective immediately by giving notice to the Supplier if:

(i) the Supplier breaches a material provision of this Agreement where that breach is not capable of remedy;

(ii) the Supplier breaches any provision of this Agreement and fails to remedy the breach within 14 days (or such other period as specified in the notice) after receiving notice requiring it to do so;

(iii) in the opinion of SPREP, a Conflict of Interest exists which would prevent the Supplier from performing its obligations under this Agreement;

(iv) all or any part of the Services do not meet the Performance Criteria on two or more occasions in accordance with clause 7; or

(v) an event specified in clause 23.2(b) happens to the Supplier.

(b) The Supplier must notify SPREP immediately if:

(i) the Supplier ceases to be able to pay its debts as they become due;

(ii) the Supplier being a company enters into liquidation or has a liquidator or administrator appointed; or

(iii) the Supplier being a natural person is declared bankrupt or assigns his or her estate for the benefit of creditors.

23.3 Potential Default

(a) For the purposes of this clause **Potential Default** means any event, thing or circumstance which does not fall within the scope of clause 20 and which likely would:

(i) result in delay in meeting any requirement of the performance of the Services;

(ii) result in the Supplier not being able to achieve a Milestone; or

(iii) give rise to a right of termination pursuant to clause 23.2 with the giving of notice or the passage of time.

(b) The Supplier must notify SPREP immediately upon becoming aware of a Potential Default and must include the following information, substantially in the form of the template provided by SPREP (if any), in its notice:

(i) the nature of and reason for the Potential Default;

(ii) how the Supplier proposes to rectify the Potential Default;

(iii) the date on which the Supplier proposes that the Potential Default will be rectified; and

(iv) any expected impact that the Potential Default may have on the delivery of the Services.

(c) If SPREP is not satisfied with the Supplier's proposed actions to rectify the Potential Default, SPREP acting reasonably, may by written notice to the Supplier, require the Supplier to immediately suspend the Services (in whole or in part) and / or terminate this Agreement in its entirety

(d) No action taken by SPREP pursuant to this clause 23.3 will:

(i) relieve the Supplier from, or alter or affect, the Supplier's liabilities or responsibilities whether under this Agreement or otherwise according to Law; or

(ii) prejudice SPREP's rights against the Supplier whether under this Agreement or otherwise according to Law.

23.4 After termination

On termination of this Agreement the Supplier must:

(a) stop work on the Services;

(b) deal with Agreement Material in accordance with clause 10.7; and

(c) deal with SPREP Material, SPREP Data, and SPREP's Confidential Information as reasonably directed by SPREP.

24. Survival

The following clauses survive the termination and expiry of this Agreement:

(a) clause 5.6 (Subcontracting);

(b) clause 5.7 (Work health and safety);

(c) clause 10 (Intellectual Property Rights);

(d) clause 12 (Indemnity and release);

(e) clause 13 (Insurance);

(f) clause 14 (Confidentiality and privacy);

(g) clause 15 (Protection of Personal Information);

(h) clause 17 (Security);

(i) clause 18 (Books and records);

(j) clause 19 (Audit and access);

(k) clause 23.4 (After termination); and

25. Notices and other communications

25.1 Service of notices

(a) A party giving notice under this Agreement must do so in English and in writing or by Electronic Communication:

(i) directed to the other party's contact person at the other party's address, as varied by any notice; and

(ii) hand delivered or sent by prepaid post, facsimile or Electronic Communication to that address.

(b) The parties' addresses are specified in Item 15 of the Agreement Details.

26. Miscellaneous

26.1 Ownership of Agreement

All copyright and other Intellectual Property Rights contained in this Agreement remain the property of SPREP.

26.2 Varying this Agreement

This Agreement may be varied only in writing signed by each party.

26.3 Assignment and novation

A party may only assign its rights or novate its rights and obligations under this Agreement with the prior written consent of the other party.

26.4 Costs

Each party must pay its own costs of negotiating, preparing and executing this Agreement.

26.5 Entire agreement

This Agreement constitutes the entire agreement between the parties in connection with its subject matter and supersedes all previous agreements or understandings between the parties in connection with its subject matter.

26.6 Severability

A term or part of a term of this Agreement that is illegal or unenforceable may be severed from this Agreement and the remaining terms or parts of the terms of this Agreement continue in force.

26.7 Waiver

Waiver of any provision of or right under this Agreement:

(a) must be in writing signed by the party entitled to the benefit of that provision or right; and

(b) is effective only to the extent set out in any written waiver.

26.8 Relationship

(a) The parties must not represent themselves, and must ensure that their Personnel do not represent themselves, as being an officer, employee, partner or agent of the other party, or as otherwise able to bind or represent the other party.

(b) This Agreement does not create a relationship of employment, agency or partnership between the parties.

26.9 Announcements

(a) The Supplier must, before making a public announcement in connection with this Agreement or any transaction contemplated by it, obtain SPREP's agreement to the announcement, except if required by Law or a regulatory body.

(b) For the avoidance of doubt, SPREP does not require the consent of the Supplier to the making of the announcement.

26.10 Specific Requirements of the Funding Donor

A Donor may from time to time specify that SPREP apply certain restrictive measures to the arrangements for the provision of the Services, including such measures which may restrict SPREP's ability to enter into a binding agreement with certain potential Suppliers. Where specified under Item 9 of Schedule 1, the following restrictive measures shall apply to this Agreement:

(a) Circumstances where the European Union (EU) is Donor

(i) Entities designated on by the EU as subject to restrictive measures in the lists provided at www.sanctionsmap.eu ("EU Restrictive Measures") are ineligible to be engaged by SPREP on European Union funded projects.

(ii) In the event that SPREP becomes aware that the Supplier falls under the scope of EU restrictive measures, SPREP shall immediately terminate the Agreement in accordance with clause 23.1(a).

(iii) Where termination of the Agreement is required under (ii) above, only the provisions of clause 23.1(b)(i) and (ii) shall remain in effect. All other

provisions under clause 23.1(b)(iii) and clauses 23.1(c) through (e) will no longer apply.

(iv) If the Supplier was aware of the designation by EU restrictive measures, SPREP reserves the right to recover any monies paid to the Supplier in undertaking the scope of works.

(b) Circumstances where funding has been provided by the Green Climate Fund

(i) The Supplier will ensure compliance with:

A. the Anti-Money Laundering and Counter the Finance of Terrorism, "know your customer" and other similar checks to ensure the Supplier meets international best fiduciary standards and practices in relation to the delivery of the Services; and

B. the anti-bribery laws of Samoa and any other relevant laws, and they shall not, directly or indirectly, pay, offer, give, promise to pay or authorize the payment of, or solicit, receive or agree to receive, any monies or other things of value to or from anyone in order to obtain, influence, or reward any improper advantage.

26.11 Governing law and jurisdiction

This Agreement is governed by the law of the Independent State of Samoa.

26.12 Privileges and Immunities

Nothing in or relating to this Agreement shall be deemed a waiver, express or implied, of any of the privileges and immunities of SPREP.

Schedule 1 – Agreement Details

Item No.	Description	Clause reference	Details
1.	**SPREP details**	**1.1**	Secretariat of the Pacific Regional Environment Programme (SPREP)
2.	**SPREP Representative**	**1.1**	Name: [***insert details***] Position: [***insert details***] Phone: [***insert details***] Email: [***insert details***]
3.	**Supplier details**	**1.1**	[***Insert name of Supplier***]
4.	**Supplier Representative**	**1.1**	Name: [***insert details***] Position: [***insert details***] Phone: [***insert details***] Email: [***insert details***]
5.	**Commencement Date**	**1.1 and 3**	The date this Agreement is signed by the last party. [OR - ***change the above text to a specific date e.g., dd/mm/yy, if required***]
6.	**End Date**	**1.1 and 3**	[***Insert the End Date***]
7.	**Option Period**	**1.1 and 3.2**	[***if no Option period is offered, delete all text in this field and replace with 'Nil'***] [***Option 1***] One period being [***Insert number***] month(s) in duration. [***Option 2***] One further period being [***Insert number***] month(s) in duration.
8.	**Standards and guidelines**	**5.1(c)**	[***Insert details of any applicable standards and guidelines, otherwise insert 'Not applicable'***]
9.	**SPREP requirements**	**5.1(e)**	**(a) Child Protection Policy** i. The Supplier must comply with its obligations, if any, under the SPREP Child Protection Policy. SPREP will ensure that the Supplier has access to this policy prior to execution of the Agreement, and the Supplier may make enquiries of SPREP around the application of,

Item No.	Description	Clause reference	Details
			or updates to, the policy at any time during the Agreement Period. ii. If the Supplier becomes non-compliant with this policy during the Agreement Period, the Supplier must notify SPREP. [***Insert particular requirements and/or additional SPREP policies with which the Supplier must comply as new sub-items after '(a) Child Protection Policy' above. For example, SPREP's Environmental and Social Safeguards policy, or any restrictive measures which may be required by the Donor – see clause 26.10.***]
10.	**Subcontractors**	**5.6**	[***Insert names of any subcontractors. Otherwise insert 'Not applicable'***]
11.	**Specified Personnel**	**8**	[***Insert names and positions of Specified Personnel. Otherwise insert 'Not applicable'***]
12.	**SPREP Material**	**1.1 and 9**	[***Insert specific Material to be provided to the Supplier by SPREP (if any) and any restrictions on the use of the Material. Otherwise insert 'Not applicable'.***]
13.	**Insurance**	**13.1**	From the Commencement Date and for the periods specified in clause 13: (a) to the extent required by Law, workers' compensation insurance in respect of the Supplier's liability for any loss or claim by a person employed or otherwise engaged, or deemed to be employed or otherwise engaged, by the Supplier in connection with the Services; (b) public liability insurance covering legal liability (including liability assumed under contract) for loss or damage to property or injury or death to persons arising out of or in connection with carrying out the Services for an insured amount of $10 million. (c) either professional indemnity or errors and omissions insurance for an insured amount of $10 million.
14.	**Confidential Information**	**1.1 and 14**	SPREP Confidential Information: [***insert relevant items***] Supplier's Confidential Information:

Item No.	Description	Clause reference	Details
			[***insert relevant items***]
15.	**Address for notices**	**25.1**	**SPREP:** Name: [***insert details***] Position: [***insert details***] Secretariat of the Pacific Regional Environment Programme Physical address: Avele Road, Apia, Samoa Email: [***Insert email address***] **Supplier:** Name: [***insert details***] Position: [***insert details***] [***Insert organisation name***] Postal address: [***Insert postal address***] Physical address: [***Insert physical address***] Email: [***Insert email address***]

Schedule 2 – Statement of Work

1. Introduction

1.1 SPREP

a. The Secretariat of the Pacific Region Environment Programme (SPREP) is the regional organisation established by the Governments and Administrations of the Pacific charged with protecting and managing the environment and natural resources of the Pacific.

b. The head office is based in Apia, Samoa with over 100 staff. There are SPREP offices in Fiji, Republic of the Marshall Islands and Vanuatu as well as SPREP Officers stationed in Solomon Islands.

c. The establishment of SPREP in 1993 sent a clear signal to the global community of the deep commitment of Pacific island Governments and Administrations for better management of the environment within the context of sustainable development.

d. The strategic direction for SPREP is clearly set out in the 2017-2026 SPREP Strategic Plan. The Plan outlines the mandate, vision and programmes for the organisation, and places strong emphasis on effective delivery of services to SPREP Member countries and territories.

1.2 SPREP's Mandate and Regional Goals

a. SPREP's mandate is to promote cooperation in the Pacific region and provide assistance to Pacific island countries and territories in order to protect and improve its environment and to ensure sustainable development for present and future generations.

b. SPREP's Regional Goals are as follows:

- **Regional Goal 1**: Pacific people benefit from strengthened resilience to climate change;
- **Regional Goal 2**: Pacific people benefit from healthy and resilient island and ocean ecosystems;
- **Regional Goal 3**: Pacific people benefit from improved waste management and pollution control;
- **Regional Goal 4**: Pacific people and their environment benefit from commitment to and best practice of environmental governance.

c. SPREP approaches the environmental challenges faced by the Pacific guided by four simple Values. These values guide all aspects of our work:

- We value the Environment
- We value our People
- We value high quality and targeted Service Delivery
- We value Integrity

2. Project Scope

2.1 [*insert the title of the head Project / Programme*] Background and Objectives

a. [***Provide an outline of the Project supporting the action / activity for which these Services are required]***

b. [***What are the Project's overarching goals, objectives and / or outcomes?***]

c. [***What is the Project's schedule for the Services?***]

3. Services (clauses 1.1 and 5)

3.1 Services to be delivered under this Agreement

a. ***Note: this section can be structured to reflect the Project's requirements for service delivery – but <u>must</u> reflect the original Service requirements as outlined in the Approach to Market. <u>DO NOT</u> insert service delivery details proposed by the preferred Supplier in their response to the Approach to Market here***];

b. [***insert description of Services***];

c. [***insert description of Services***]

d. In providing the Services, the Supplier must:

- [***insert specific Project requirements or Service delivery expectations – e.g. minimum requirements for Supplier personnel, key tasks, Project expectations or priorities, any known obstacles / limitations and Project timeframes***].
- [***insert specific Project requirements or Service delivery expectations***].

4. Deliverables (clause 1.1)

No.	Description of Deliverable / Milestone	Contact for Delivery	Delivery Location / Email	Due Date
1.				
2.				
3.				
4.				
5.	[***insert or delete rows as required***]			

5. Performance Criteria (clauses 1.1 and 7)

No.	Service/Deliverable	Performance Criteria	Assessment date
1.			
2.			
3.			
4.			
5.	[***insert or delete rows as required***]		

6. Progress meetings (clause 6.1)

6.1 The Supplier is required to attend meetings as follows:

Meeting Type	Representatives Required	Frequency	Teleconference / Site
[***insert or delete rows as required***]			

7. Reporting (clause 6.2)

7.1 During the term of this Agreement the Supplier must provide SPREP with reports as set out in the table below:

Report type and content	Description	Due Date
	[***Ensure you highlight here whether one of the reports in this section is also listed as a Milestone in the table above – i.e. you could state 'The submission and acceptance by SPREP of this report represents Milestone No. 2 for the Agreement'***]	

Report type and content	Description	Due Date
[***insert or delete rows as required***]		

8. Facilities and Assistance Offered by SPREP

8.1 [***if SPREP will not be providing any direct support or assistance to the Supplier, then delete this text and insert 'Nil'***] SPREP will provide the following facilities and assistance to support the Supplier in their delivery of the services:

a. **Logistics –** [**e.g. assistance in gaining entry clearance, confirming accommodation, work sites and related facilities**]**;**

b. **Documentation** - [**e.g. SPREP will provide relevant Project materials for context, supporting data or previous reports**]**;**

c. **Facilities -** [**e.g. if the Supplier is likely to be working from SPREP's central or regional offices, whether a room and IT support will be provided**];

d. [**insert any other assistance which SPREP will provide to the Supplier**]

9. Unspecified

9.1 [*insert new headings / sections consistent with the original Terms of Reference / requirements issued with the Approach to Market – or – delete this section].*

Schedule 3 – Payment

1. Maximum Agreement Value

1.1 The maximum value of the Agreement inclusive of all taxes and charges will not exceed **USD $**[***insert maximum value including all fees and expenses – if any***] as set out below.

2. Fixed Fees (including all expenses clause 11)

2.1 The Supplier will invoice SPREP for the following Fixed Fees for the Services: [***retain if the payment arrangements for the Services are to be based upon a Fixed Fee arrangement. If the payment arrangements are to be based on Daily or Hourly rates, delete this Fixed Fees section***]

Type	Charges	Units	Total
Fees (fixed)			
Other charges (if any)			
		TOTAL	

3. Milestone Payments

3.1 Progress payments of the Fixed Fees (inclusive of all taxes and charges) will be made as follows: [***retain if the payment arrangements for the Services are to be based upon a Fixed Fee arrangement. If the payment arrangements are to be based on Daily or Hourly rates, delete this Milestone Payments section***]

Milestone date	Milestone/Deliverable	Milestone Payment
	TOTAL	

4. Hourly rates (clause 11)

4.1 The Supplier will invoice SPREP for the Services monthly in arrears based on the following Hourly rates: [***retain if the payment arrangements for the Services are to be based upon agreed Hourly rates. If the payment***

arrangements are to be based on Daily rates or Fixed Fees, delete this Hourly rates section]

4.2

Personnel	Hourly rate (USD)	Units	Maximum hours or days to be worked daily	Charges
			Sub total	
			TOTAL	

5. Daily rates (clause 11)

5.1 The Supplier will invoice SPREP for the Services monthly in arrears based on the following Daily rates: [***retain if the payment arrangements for the Services are to be based upon agreed Daily rates. If the payment arrangements are to be based on Hourly rates or Fixed Fees, delete this Daily rates section***]

Personnel	Daily rate (USD)	Units	Charges
		Sub total	
		TOTAL	

6. Expenses (clause 11.5)

[***Option 1 – retain or delete as required***]

a. No allowances or expenses are payable to the Supplier.

[***Option 2 – retain or delete as required***]

a. Subject to Item 6.b below, SPREP will not pay any travel, accommodation or other expenses unless they have been pre-approved in writing by SPREP.

b. The Supplier will be reimbursed for the actual cost of travel and related accommodation where they are pre-approved in writing by SPREP. The Supplier must submit an invoice for those expenses and SPREP will reimburse the Supplier in accordance with the invoicing procedures set out in this Schedule.

7. Invoicing requirements (clause 11.2)

a. Invoices must contain the following information:

- the details of the amount of time spent by each of the person including Specified Personnel on the Services for the period to which the invoice relates and a record detailing how the relevant Milestone dates have been met;
- contract number;
- period covered by invoice;
- title and description of the Services;
- the amount of any allowances or expenses which are to be reimbursed in accordance with Item 6 of this Schedule 3 together with any substantiating material required; and
- any other information reasonably requested by SPREP from time to time.

b. Invoices must to be sent to:

[***Insert position and name of SPREP's representative***]

[***Insert details of Programme / Section / Project***]

Secretariat of the Pacific Regional Environment Programme

P.O. Box 240, Apia, SAMOA

Execution page

EXECUTED as an agreement

SIGNED for and on behalf of the Secretariat of the Pacific Regional Environment Programme

_____

Kosi Latu

Director General of SPREP

_____

Date

SIGNED for and on behalf of [***Supplier name***]

_____

[Authorised representative's name] (print)

_____

[position]

_____

Date

Appendix 5: Comments and Responses Matrix

Comments and Responses Matrix for Van-KIRAP MTR Final Report (Comments received by 18 August 2021; additional comments on responses received from SPREP 23 August 2021; addressed by MTR team 24 August 2021).

Institution	Comments	Responses
VMGD (Sectors)	**General** There was no clear and well-established processes and guidelines between SPREP PCU and Van KIRAP PMU especially when it comes to disbursement of project funds. Both parties do not quite understand the required steps from each end e.g the Vanuatu government has its own requirements and SPREP/GCF has their own. This information must be made clear to allow for proper planning on both sides and to avoid further delays in the disbursement of project funds.	Can suggest PMU and SPREP discuss clarification of financial processes.
VMGD (Sectors)	**General** There is a urgent need for more engagement with the five sectors as key partners in this project according to the MOU signed with the Ministry of Climate Change. Due to budget constraints, Van KIRAP was not able to organize those relevant activities to boost sector's engagement and confidence on this Project	MTR report recommendation 16 recommends PMU provide additional support to Sector Coordinators to finalise sector case studies. We believe the matter described in this comment is therefore sufficiently covered under this recommendation.
VMGD (Sectors)	**General** The other issue with the project which I failed to see is the students intern, this is an important part of the project but due to the ongoing delay in project funds, it may not be possible to have them onboard now that we are coming close to the end of the project.	With the understanding that the comment is referring to the student interns working on climate data, the review team agree this is a problem and one of many impacts the delays in GCF funds disbursement causes, as well as delay in approving project extension. Therefore, this has been the focus of recommendations 1 and 2.
VMGD (Sectors)	**General** After 2 years with the project and having gone through a lot of challenges, the Van KIRAP project PMU will need to consider flexibility and provide some sort of incentives to control staff turnover rate. This is a management issue at Van KIRAP PMU and PCU to look into.	Staff incentives are a HR policy and procedures matter for VMGD and beyond the scope of the MTR. Any changes would need to be within GCF guidelines and project budget.

VMGD (Sectors)	**General** Sector Coordinators should also have designated Office space/desk at the Van KIRAP PMU Office to give them the opportunity to spend time with the team, at least 2-3 days per week should be spent at the PMU to allow for more constructive discussions and interactions between sector coordinator, PMU and VMGD climate team.	Good suggestion, VMGD and sectors could do this.
VMGD	**General** VMGD Management noted that the report did not acknowledged funding delays too much that affected implementation of project, hence this mid – term review report, *"focused on effectiveness of delivery of outputs, and factors affecting progress".*	Under effectiveness, delays in disbursement of funding is identified as the most significant factor negatively affecting project delivery (p.15). Recommendation 2 asks the GCF to address this.
VMGD	**Recommendation 2** • In addition, need for more efficient system for fund transfer process to project account. • SPREP as an accrediting entity should provide a supporting (reserve) fund in case where there are delays, given the long process of 6 months to approve reports and the date line of the project. • Fund request exceeding amount of 700,000USD to be permitted. *suggestion* - if a six-month budget is provided when large procurements/large budge activities are planned. • Advantage of larger amount/annual budget will make it efficient for budget planning/tracking according to full year salary, short contract fees, sector/PMU operational budgets. Have chapter heads for each of these sections, and operational. Implementation of activities depends on funds.	These are related to SPREPs internal financial procedures and regulations and are beyond the scope of the MTR.
VMGD	**Recommendation 3 & 5** • Merging of two PMUs is agreed, and operating within one office within VMGD office.	Recommendation 5 has been revised to include the proviso that TA recruitment is subject to GCF formally granting project extension.

	• Put on hold PMU recruitment of TA for a year. VMGD Management Team will focus its capacity to provide support needed to the VMGD/PMU *Side comments – VMGD has achieved meeting FAA conditions, has completed numerous projects, therefore is more than capable of delivering. Technically project ends next year. Therefore, no more new recruitment until project extension is confirmed*	
VMGD	**Recommendation 7** Agreed. DG/Director/Managers allowed to attend meetings with GCF to allow transparency. EPA agreement can allow for this. As previously discussed during few meetings that any discussions with GCF concerning the project, Vanuatu would also be copied (DG) to allow us for planning and adjustment.	N / A
VMGD	**Recommendation 8** Consultant contracted under SPREP. Operational funds are with VMGD. DSA rates are SPREP, not VMGD, and not budgeted according to this rate. SPREP to meet all cost (Salaries, DSA etc…) associated with the consultant if the consultant contracted under SPREP. VMGD PMU will only meet the cost of the consultant contract by VMGD/PMU based on local rate according to Vanuatu government financial regulations.	Recommendation 8 only relates to production of an internal newsletter to be circulated by email so would have no cost implications.
VMGD	**Recommendation 9** No further long-term recruitment. Only short-term consultants as required for project implementation activities with intension to build capacity.	This position could be an STA with intermittent inputs.
VMGD	**Recommendation 11** • EXIT strategy to be initiated/driven by PMU and VMGD Management. Director VMGD to recommend when and if a local consultant is needed. VMGD management team will put	See revision to recommendation 5

	together an exit strategy with a support of a short-term consultant. • Agreed to have in place costs and budget to inform VMGD planning for continuation of activities within the business plan. • M & E report will inform and guide Exit Strategy • TWG will also provide guide and support Exit Strategy	
VMGD	**Recommendation 12** • Agreed. O&M (operation & maintenance) costs from project will also guide Exit Strategy	N/A
VMGD	**Recommendation 13** • Agreed. For the RADAR, this will be cover by the Exit strategy as well	N/A
VMGD	**Recommendation 15** • Agreed that there are gaps, in capacity. • Project to support a short-term contract for electronic engineering to support VMGD engineering team • Install NEON system locally to allow easy data access	N/A
VMGD	**Recommendation 16** • Agreed. Need for CSIRO travel to oversee sector case studies. • Additional suggestions are to have shared costs between VMGD and DPs for quarantine. • Be fully Covid 19 vaccinated. • Have one trip annually with only one/two travellers, but remain in Vanuatu for two weeks instead of one. • DG has given ok for any Delivery partners wanting to come to Vanuatu will indicate and the ministry of climate change will assist with providing covid requirement for Vanuatu.	N/A
VMGD	**Recommendation 17**	N/A

	• Agreed. But not cost effective. Islands are dispersed, better to visit one full province per visit. We know exactly what is best for Vanuatu.	
VMGD	**Recommendation 18** • Short contract Gender consultant to build capacity of VMGD to run activities with gender inclusive, for sustainability after project life. (Short workshops and trainings, mainly on data collections etc.…)	N/A
VMGD	**Recommendation 19** • Include DLA/NDMO -in the future include sectors who have offices/officers stationed in provinces and area councils.	N/A
VMGD	**Recommendation 21** • Same as R3 & R5 • Savings from positions can be used for sitting allowances for VMGD – Incentives for Managers on VMGD management on providing advice and direction to the PMU, contributing to preparing report drafts and editing. (For example, sitting allowances/few days allowances).	MTR recommendation 5 for contracting of a Project Management Advisor is in response to an identified capacity gap. A TOR for this position predates the MTR. Reallocation of funds for this position is beyond the scope of this MTR and would be subject to GCF and SPREP financial procedures and guidelines.
VMGD	**Recommendation 22** • Agreed. Have short contract Gender consultant to build capacity of VMGD to run activities with gender inclusive, for sustainability after project life.	N/A
VMGD	**General** VMGD seeks additional support from SPREP in terms of climate and familiarity of Pacific context.	The SPREP PMU in Port Vila has a CIS Officer. This position should continue within the combined PMU. If additional support is needed, VMGD should follow up directly with SPREP CCR.

VMGD	**General** Reference to page 14. Radar is an integral part of the project. It is essential for Vanuatu in terms of EWS. We cannot leave this out. (Support tropical cyclone and flood warning e.g., TC Pam, TC Harold.] Suggestion to insert this sentence to p14.	MTR is not suggesting leave it out. Identified obstacle relates to GCF conditions (eg 5 quotes). Have included additional sentence on importance of this item to GoV.
APCC	Pg. 17 • I have revised this to reflect that we are not exactly sure of the origin of the issue. We believe it may have been damaged by TC Harold as we learned that they were no longer operational when they were checked after TC Harold, but it very well could have been another issue. • I have also added our intentions to resolve the issue as travel restrictions are lifted.	The suggested changes have been integrated in the final version of the MTR report.
APCC	Pg. 38 • The "agromet software prototype" mentioned in the Mid-Term Review Actual column, is referring to the VaCSA system and I wanted to make sure this was clear	The suggested changes have been integrated in the final version of the MTR report.
Sector Coordinator	Create each sector chapter head and have its funds directly managed by DoWR Finance.	These are related to VMGD's internal financial procedures and regulations and are beyond the scope of the MTR. VMGD could discuss this proposal with SPREP.

Supplementary Report to the Mid-term Review Report



Mid-term review of "Climate Information Services for Resilient Development in Vanuatu" (CISRD) or

Vanuatu Klaemet Infomesen blong redy, adapt mo protekt (Van-KIRAP) Project

By FCG New Zealand

August 2021

Supplementary Report to the Final Mid-Term Review Report

Mid-term review of "Climate Information Services for Resilient Development Planning in Vanuatu" (CISRDP)

2018 – 2021

October 2021

Independent Mid-term Review completed by:

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1 Introduction

The purpose of this paper is to provide further insights on three aspects of the Van-KIRAP Mid-term Review (MTR) as requested by Green Climate Fund (GCF). This paper should be interpreted together with the MTR Final Report. The findings of this paper are not in conflict of the findings of the MTR Report, and the same data is used as the basis for the provided conclusions and reiterated recommendations. The MTR Report was endorsed by the Implementing Agency SPREP (the commissioner of the MTR), VMGD and SPREP CCR (Executing Entities), Sector Coordinators and the Delivery Partners after addressing their feedback and comments.

The three areas discussed in this paper are:

1. Capacity Gaps;
2. Colocation of the two PMUs; and
3. Equipment Procurement, including operation and maintenance (particularly the Doppler Radar).

2 Capacity Gaps

2.1 Overview

The main Mid-term Review (MTR) report made a number of findings in relation to identified capacity gaps. The report included a total of nine recommendations related to addressing capacity gaps. Three of these recommendations (5, 11 and 16) related to the need to increase project management capacity within the Project Management Unit (PMU). Two recommendations (4 and 21) related to monitoring and evaluation systems and capacity. Two recommendations (14 and 15) related to data management. One recommendation (10) related to improved use of training material and training modules, and one (9) related to the need for a gender and inclusion focal point within the VMGD PMU. This section of this report will further elaborate on identified capacity gaps and make additional recommendations.

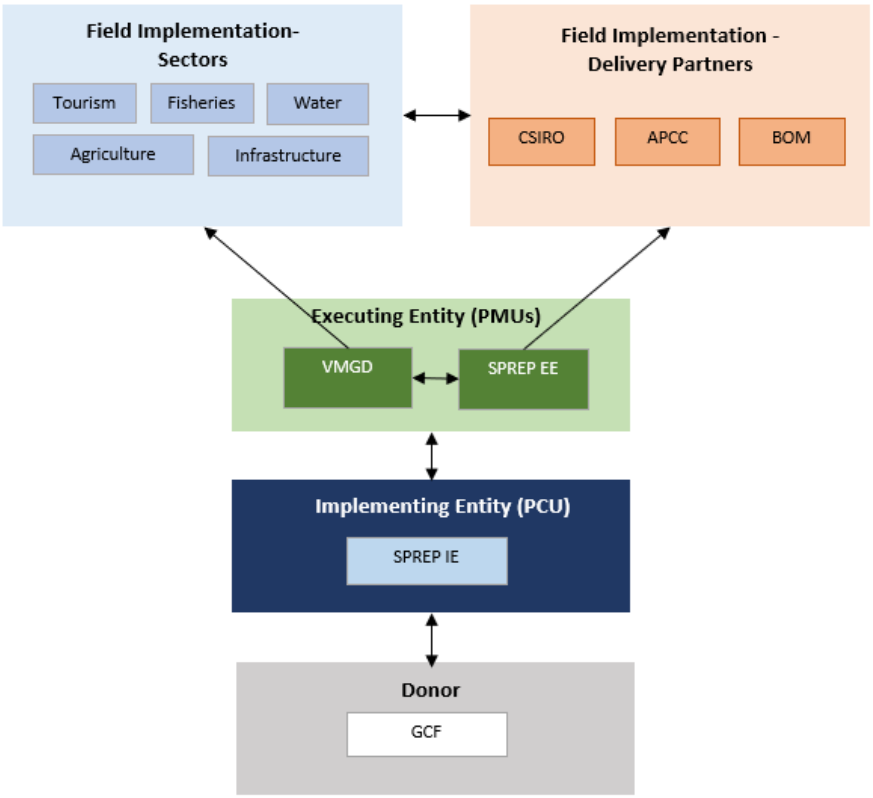
The project has experienced several challenges that have impacted the capacity at all levels to operate efficiently and effectively. The below sections describe the strengths and weaknesses at each operational level and focuses on the interaction between different actors and the impact of the relationship and its functionality in the delivery capacity. It shall be noted that the scope of this MTR has not included a capability assessment and there is not sufficient data based on the KIIs to speculate about lacks and strengths at individual capability level, nor does it align well with the focus of the MTR.

A key factor to keep in mind when looking at capacity gaps in the Van KIRAP project is the fact that although the project has formally been in the implementation phase since January 2018 there were delays associated with redesigning aspects of the project to address 20 conditions imposed by the GCF as part of the Funded Activity Agreement (FAA). SPREP requested a halt to the project so the FAA conditions could be met, and project activities did not properly begin until after the second GCF disbursement in August 2019. The original project design had deficiencies which the FAA conditions were designed to address. It should also be noted that this is the first GCF funded project that SPREP has managed, and it is also one of the first projects the recently created GCF had approved. Everyone involved here has been developing and implementing within a new framework.

It is important to not look at different actors in isolation from one another since their delivery capacity is tied to the relationship with other structures. Therefore, to assess the capacity gaps in detail, the project delivery structure needs to be described. The structure is simplified to include Donor (GCF), Implementing Agency (SPREP), the Executing Entities (combination of

VMGD and SPREP EE), and work at the field can be described to be delivered with the sectors and with the delivery partners (Figure 1).

Figure 1. Delivery Structure.



2.2 Donor and Implementing Entity (IE)

SPREP is the implementing entity (IE) for this project and this function is carried out by the Project Coordination Unit (PCU) within SPREP HQ in Samoa. The PCU is the principal point of contact between the project and the GCF.

The main area impacting the project management capacity at the IE level **was the project redesign in 2019**. The FAA conditions set by the GCF at the beginning of the contract caused significant delays in the project delivery, since SPREP struggled to meet the strict conditions as per the GCF's requirements. As part of this project redesign process, the project logical framework was substantially redesigned (GCF agreed to this but required project outcome indicators to remain unchanged). During this redesign process, implementation was put on hold and the project framework was reorganised to create a clearer structure and better efficiencies around the delivery. It should be noted that the project redesign did not resolve all the FAA conditions, and during the time of the MTR, SPREP was still aiming to meet the final FAA condition (see Chapter 3 of main report).

The redesign process has presented challenges in reporting and the development of workplans for the two executing entities. The SPREP PMU has also been without a Manager since mid-2019 (the CIS Advisor has been acting in the role in addition to their technical advisory role). Consequently, the **SPREP PCU has filled several capacity gaps from the project delivery levels to meet the requirements of GCF reporting**. However, operating between the donor and EE has been a challenging task due to the changing reporting

requirements and lack of capacity at the EE level, which has led to a need for resubmitting some of the key reports to the GCF. There has been also delays by the GCF in approving submissions in a timely manner, which has led to delays in fund disbursements.

Regardless of some of the initial administrative challenges caused by the transition, the changes were perceived well at all levels and agreed to bring needed clarity on the project objectives and delivery approach and these changes have positively impacted to the delivery capacity due to the clearer logframe structure. The reporting process is now better integrated but further improvements in the process could be made through having a more comprehensive project monitoring and evaluation framework and processes.

2.2.1 Monitoring and evaluation systems and capacity

As noted in the main report, there were attempts to put in place a project level M&E system that did not result in a product that was fit for purpose and easily useable by the executing entities. There is still no project monitoring and evaluation framework in place and recommendation 4 in the main report suggested that SPREP PCU should finalise this framework as soon as possible and then work with the VMGD PMU to implement the M&E framework. This is something that could be built into the proposed project management advisor's role.

2.3 PCU and PMUs level

2.3.1 Project management capacity

There is a recognition across stakeholders that **there are challenges in the area of project management capacity within the VMGD PMU**. It was noted in the main report that both the delivery partners and SPREP PCU have supported many of the activities that are the responsibilities of the EEs, since the PMUs were formed with the basis of implementing a project instead of designing a project. However, much of the EEs activities have been project design related, which has caused some extra pressure on the EEs capacity to manage and coordinate those processes. SPREP and the Director General of the Ministry of Climate Change and the Director of VMGD have been in discussions regarding hiring a project management technical advisor. The MTR report strongly recommended that this goes ahead (recommendation 5). The project management technical advisor should be located within the VMGD PMU but report directly to the VMGD Director. There is a strong need to ensure sector plans and delivery partner inputs are well aligned and coordinated, as well as other project management inputs around community climate centres. Having strong project management capacity within the PMU is crucial to support these processes.

The lack of timely access to project funds (caused by disbursement delays) has been frustrating for the VMGD PMU and has contributed to the delays in delivery of project outputs. The PMU's perception of changing reporting requirements has also led to frustrations in the processes and lack of trust between the VMGD PMU and SPREP PCU. The lack of trust and understanding of the process leads to underutilisation of the current capacity. Some of this could have been avoided if in-country visits had been possible in 2020 and 2021 and the expectations of management and transparency around the issues and fund disbursement delays could have been clarified in person and processes explained.

The main report outlined ongoing challenges with project reporting and forward planning within the VMGD PMU. Some areas of the project were being implemented well and others less so. As an example, under Component 1, VMGD has been progressing well since they are confident with the subject matter but under other Components there have been bigger issues, such as with working with sector coordinators to ensure sector case studies (component 2) are well planned and sufficiently in place to allow efficient and effective engagement with delivery partners.

Since the PCU has stepped in and filled many of the capacity gaps, it has also blurred the lines between the responsibilities of the decision-making entities. Once a project management

advisor is present within the VMGD PMU, roles and responsibilities in relation to reporting and development of work plans should be clarified between the PCU and the PMU. It is likely once the workplans for the sectors have been approved, FAA conditions have been met and the disbursement delays have been solved, the existing capacity can be more effectively utilised and built upon.

2.3.2 Monitoring and evaluation systems and capacity

A **well-established M&E structure, which would outline the monitoring roles and responsibilities between different actors, should contribute to improved project delivery and reporting**. This was the focus of recommendation 21 in the main MTR report. The Project has not had a dedicated M&E position. The lack of an M&E plan impacts the efficiency of monitoring the project progress, which impacts in turn the project management. Evaluating the efficiency of the processes is a challenge without clearly tracked processes and achievements. These results could also be used as further proof for the GCF about the impact of the external delays, and for the internal stakeholders as evidence of the root of the problems and the diversity in them. Although it was stated by many participants that the key issue is the delays in funds disbursement, there is strong evidence that many other issues have also impacted the slowness of the delivery. A fit for purpose M&E plan, updated regularly based on quality data and information, would enhance the efficiency of the delivery by underlining which are the pending matters and which of these matters are the responsibility of which stakeholder.

Recommendation 11 in the MTR report stressed the need for the VMGD to oversee the development of a project exit strategy. A key focus of the project exit strategy would be planning and budgeting for the operation and maintenance of climate and ocean monitoring equipment. This is the focus of the third section of this report and will be discussed in more detail there.

2.4 PMUs and Sectors

2.4.1 Project management

The PMUs have worked closely with the sectors to develop their case studies which is the principal project output within each of the sectors. However, **development of sector case studies under Component Two, has been slow and inconsistent.** The project will have to focus on getting sector case studies in place, as well as clear processes for the effective and inclusive dissemination of CIS through community climate centres, if it is to achieve its objectives by the end of the project. Sector plans have been a long time under development which cannot entirely be attributed to the fund disbursement delays. The sector coordinators have needed support from the SPREP IE to finalise these, and several of them were still under way by the time the MTR took place. This should be the responsibility of VMGD as the Executing Entity and is a further indicator of capacity constraints there. As noted in recommendation 16 of the main MTR report, there is an urgent need for the PMU to provide additional support to the sector coordinators to ensure case studies are in a position to maximise the inputs of delivery partners once travel is possible, most likely in the first half of 2022.

2.4.2 Data and information management

Recommendation 14 in the main MTR report highlighted that the project would benefit from the CIS data being stored on a cloud-based platform. This could be done at no cost to VMGD (or the Van-KIRAP project) as a platform is already provided by the Australian Bureau of Meteorology for Pacific Island Meteorological Services. This would help facilitate more timely and efficient data-sharing processes (recommendation 15).

3 PMU Colocation

This project has two Executing Entities, VMGD and SPREP. Both have a project management unit (PMU) in Port Vila to directly oversee this project. SPREP is also the Implementing Entity, so these two roles (EE and IE) are managed within separate parts of SPREP – the Project Coordination Unit (PCU) acts as the IA and the Climate Change Resilience Programme acts as the EE. The SPREP PMU in Port Vila sits under the Director of the SPREP Climate Change Resilience Programme, based at SPREP HQ in Apia. As discussed in the findings of the MTR report, there are a number of inefficiencies in having two PMUs located in different parts of Port Vila and the MTR report included the following recommendation:

Recommendation: There are currently two PMUs (one SPREP and one VMGD) located in different parts of Port Vila. This is not conducive to effective and efficient project management. **These two existing PMUs should merge and be located at VMGD premises**. There is already agreement between SPREP and VMGD on this and it **should be implemented by September 2021**. The current SPREP EE PMU CIS Technical Advisor should take a technical advisory role within the VMGD Project Management Units (PMU) and focus supporting the collaboration between delivery partners and sectors, identifying the synergies in technical work and facilitating the collaboration. He would report to both SPREP and VMGD.

This recommendation does make a clear recommendation for the personnel of the two current PMUs be located together at VMGD and also recommends they merge as one PMU. **Merging the two PMUs would raise complications for the overall institutional and contractual agreements between SPREP and GCF so a formal merger should probably not go ahead**. The practical collocation should go ahead for the reasons stated in the MTR report. There have been ongoing discussions between SPREP and VMGD about collocating the two PMUs but up to now it has not been enacted. It would be more effective and efficient if the two PMUs were located together in the VMGD building. The SPREP PMU Climate Services Technical Advisor should assume that same role within the VMGD PMU. He should continue to report to the SPREP Climate Change Resilience Unit but also have a direct line of reporting to the VMGD. This has already been occurring in practice with the current VMGD Director (since January 2021) having regular weekly reporting and meetings with the two PMU managers to update him on progress and challenges.

The diagram below indicates the proposed management reporting arrangements for the collocated PMUs:

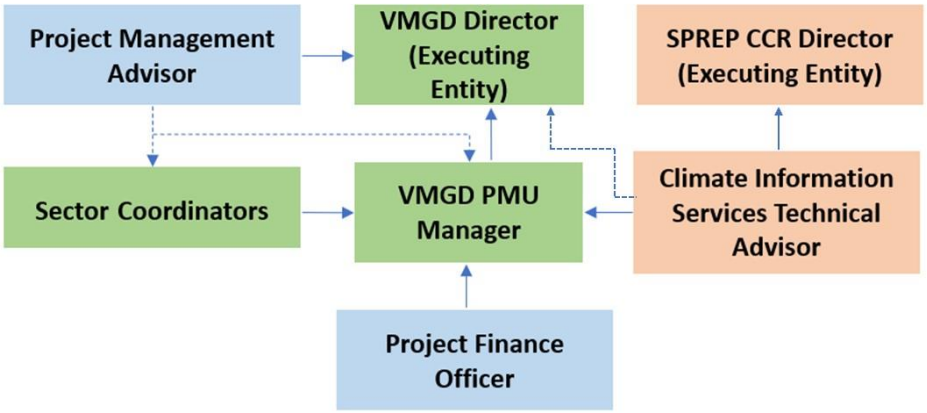


Figure 2. Proposed management reporting arrangements

4 Equipment Procurement and Maintenance

The main report highlighted the need for procurement of equipment to be underpinned by a well-developed operations and maintenance plan (O&M Plan). This should include identification and training of the relevant VMGD staff (and relevant sector staff if applicable). The O&M plan should also include realistic costings to be included in work plans and budgets. As noted in the main report, the Agromet stations had ceased to function and there was not the capacity in country to get them operating again. COVID-19 travel restrictions have prevented APCC technicians from travelling to Vanuatu to carry out repairs, as well as conduct capacity building of VMGD and Agriculture Department technicians. This situation has highlighted the need to embed equipment O&M plans into future programming. The procurement of various weather and ocean monitoring equipment, including a Doppler Radar, presents a significant challenge of ensuring sustainability of outcomes from the Van-KIRAP project.

4.1 Doppler Radar

The Doppler Radar represents a particular challenge as it is a very high-cost item and O&M of the technology is expensive, and this expertise does not exist in Vanuatu at the moment. Moreover, only a few countries in the Pacific Region have the capability for the maintenance of such equipment. The budget to support O&M of the radar for its full lifetime will need to be realistically assessed. The Doppler radar has importance above and beyond this project to the Government of Vanuatu and this has been highlighted by the VMGD (and the Ministry of Climate Change more broadly) to be a top priority for them. A straightforward recommendation on whether to proceed with the Doppler radar procurement or not is beyond the scope of this MTR. This report draws on an independently conducted technical study on the merits of different types of Doppler radar, as well as interviews with various project stakeholders, to highlight some considerations going forward.

The New Zealand National Institute of Water and Atmospheric Research (NIWA) was commissioned by SPREP to carry out a cost benefit analysis (CBA) of the Doppler Radar. The NIWA CBA assessed two types of Doppler Radar, a “C Band” and an “S Band”. NIWA assumed a purchase cost of around USD 2 million for a C band radar with an estimated extra 50% cost for an S band radar. The NIWA CBA report made the following points about the merits of C band versus S band radars:

- *Both S band and C band radars are used in other Pacific region countries, although the recent favouring of C band systems suggests an increasing availability of local peer support and expertise if the C band system is selected.*
- *The performance of present-day C band and S band radars in detecting precipitation types and drop sizes are similar, although S band radars may have ‘an edge’.*
- *Due to their smaller size, C band radar are less likely to be damaged by extreme events such as storms or cyclone. This is important considering the frequency of storms and cyclones in Vanuatu.*
- *Theoretically S band radar has a greater physical range than C band radar (400 kilometres versus 250 kilometres). Although this extra range has limited use due to ground clutter at short ranges, the curvature of the Earth and the widening of the radar beam, it does provide a greater ability to pick up phenomena such as ashfall at longer distances, an issue of note for Vanuatu given its volcanic activity.*

The CBA was expected to provide details on the financial benefits of Vanuatu having a Doppler radar that could provide a monetary rationale underpinning the purchase. The report could not provide a comprehensive and detailed financial estimate of the whole of costs and benefits finding that “the data needed to describe and quantify most of these benefits were not

available for this analysis". However, based on available data related to quantified potential savings for reduced losses from early warning of TC Pam and TC Harold type events, the study estimated that the C band radar would come close to paying off its investment assessed against avoided losses (the payoff using S band was lower). There is also potential for further cost recovery from aviation weather services.

The NIWA CBA report goes on to recommend the C band radar over the S band:

Based on the items above, but especially in view of the risk of damage and Vanuatu's exposure to extreme weather events like cyclones, C band radar would appear to offer technical benefits over the use of S band radar ….. Based on the work conducted, while C band radar lacks the technical capacity of S band radar to detect more distant (>250 kilometres) phenomena such as ashfall, C band radar would seem on balance to offer a better investment than S band radar.

The CBA report basically establishes that there is a sound case for Vanuatu to invest in a C band radar (rather than an S band). This assumes that there is the technical and financial capacity to maintain the radar. The Van KIRAP budget has allocated USD 20,000 per annum for O&M of the radar but the NIWA CBA identified that O&M is typically in the range of 5-10% of the purchase cost on an annualised basis over the life of the equipment (up to 20 years). Assuming a USD 2 million purchase cost, this would equate to between USD 50,000 and 100,000 per annum which would have to be factored into the overall budgeting calculation for purchasing and operating a Doppler radar.

Another consideration is the availability of a suitable site and related infrastructure. At the time of carrying out consultations for the main MTR report, the review team was under the impression that a site had been secured but this has subsequently been clarified as not being the case. In addition to the above budgetary considerations, VMGD (through the PMU) will need to confirm availability of a suitable site as well as a report confirming what is there for the radar and a plan (with costings and sources) on how to build relevant platforms (e.g. road accessibility, IT platforms (wave band etc), land procurement, Government co-financing etc).

In addition to recommendation 13 in the main report (which highlighted the gap between the USD 20,000 allocated for radar O&M and the NIWA CBA estimate of 5-10% of purchase cost (or USD 50,000 to 100,000 per annum) the review team would make the following further recommendations:

- The PMU to complete a report confirming availability of a suitable site as well as outlining what infrastructure is already there for the radar and a plan (with costings and sources) on providing the necessary infrastructure (e.g. road accessibility, IT platforms (wave band etc)).
- VMGD to ensure Government co-financing to underpin the radar i.e. platform needed (as outlined above with land, roads etc) and operation and maintenance.
- VMGD to ensure confirmation of Government co-financing to support the acquisition of the radar (if cost is outside what is provided by the GCF in the budget).
- The PMUs to seek the five quotes (if possible) or at least seek whether it is possible to have five quotes, and provide this to the GCF for a decision by the GCF to either cancel the procurement or move forward with the procurement.

5 Conclusion and Recommendations

This supplementary report has provided further analysis on three issues arising from the MTR of the Van-KIRAP project. These three issues are 1) Capacity Gaps; 2) Colocation of the two PMUs; and 3) Equipment Procurement, including operation and maintenance (particularly the Doppler Radar).

In relation to capacity gaps, this report has not made any specific additional recommendations in addition to the nine recommendations related to capacity gaps found in the main MTR report. This report does, however, reiterate the specific priority need to increase project management capacity within the VMGD PMU. This report also emphasises the need for a fit for purpose M&E system and improved data management (cloud-based).

In relation to the second issue of co-location of the two existing PMUs, this report modifies the recommendation of the main MTR report and suggests that all staff of both PMUs be co-located in the VMGD building but that a formal merger into one PMU is not necessary.

This report emphasised that whilst the cost benefit analysis commissioned under this project provides a valid evidence base in favour of the purchase of a “C class radar” there are a number of issues that need to be addressed. This report makes the following further recommendations in relation to the Doppler radar:

- The PMU to complete a report confirming availability of a suitable site as well as outlining what infrastructure is already there for the radar and a plan (with costings and sources) on providing the necessary infrastructure (e.g. road accessibility, IT platforms (wave band etc)).
- VMGD to ensure Government co-financing to underpin the radar i.e. platform needed (as outlined above with land, roads etc) and operation and maintenance.
- VMGD to ensure confirmation of Government co-financing to support the acquisition of the radar (if cost is outside what is provided by the GCF in the budget).
- The PMUs to seek the five quotes (if possible) or at least seek whether it is possible to have five quotes, and provide this to the GCF for a decision by the GCF to either cancel the procurement or move forward with the procurement.

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