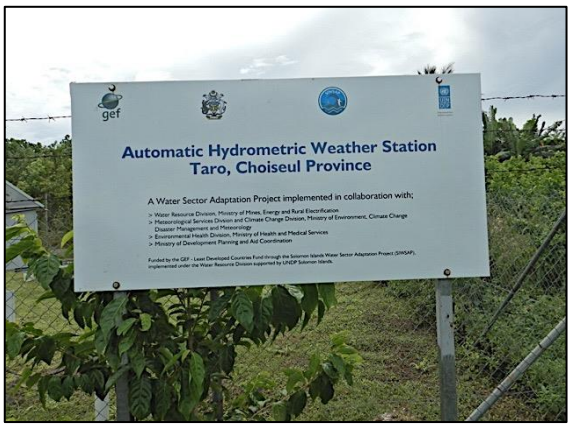
TERMINAL EVALUATION (TE) REPORT

SIWSAP

Solomon Islands Water Sector Adaptation Project

GEF Project ID 4725 / UNDP PIMS 4568

July 2019



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Co-evaluators - SIWSAP Terminal Evaluation (TE) Team

Some quotes from the TE consultations

"Gud Wata Fo Strogem Komuniti Lo Evritaem"
(Good water for strong and sustainable communities)

SIWSAP Motto

"Post-project sustainability - in all its forms - is what matters most"

Dr Melchior Mataki
Permanent Secretary, Ministry of Environment, Climate Change, Disaster Management & Meteorology

"SIWSAP is truly effective – it has touched the daily lives of the common people"

Mr Ted Blessing
Chairman of Aurigi (Santa Catalina) Community Committee

"Most important is where do we go from here? - the Future"

Ms Joy Papao
SIWSAP Project Manager

"Never has so much been achieved by so few for so many"

Steve Raaymakers, TE consultant
adapted from Churchill, 1940
with regard to the unprecedented achievements of the SIWSAP Project Management Unit

"Forget the mistake – remember the lesson"

Steve Raaymakers, TE consultant
adapted from Albert Einstein

PROJECT DATA

Project Title:	**UNDP-GEF Solomon Islands Water Sector Adaptation Project (SIWSAP)**	
GEF Agency:	United Nations Development Programme (UNDP)	
GEF Project ID:	4725	
UNDP Project ID & PIMS:	ID 00088631 / PIMS 4568	
UNDP Atlas Award ID:	00078275	
Country:	**Solomon Islands**	
Region:	Asia Pacific	
GEF Cycle & Trust Fund:	GEF 5 - Least Developed Countries Fund (LDCF)	
GEF Focal Area:	Climate Change	
GEF Focal Area Objectives: (Climate Change Adaptation - CCA)	CCA-1: Reduce vulnerability to the adverse impacts of CC, including variability, at local, national, regional and global levels. CCA-2: Increase adaptive capacity to respond to the impacts of CC, including variability, at local, national, regional and global levels. CCA-3: Promote transfer and adoption of adaptation technology.	
UNDAF Outcome: (UNDAF Pacific Region 2013-17)	Outcome 1.1: By 2017 the most vulnerable communities across the PICTs are more resilient and select government agencies, civil society organizations and communities have enhanced capacity to apply integrated approaches to environmental management, climate change adaptation/mitigation and disaster risk management.	
UNDAF Outputs: (UNDAF Pacific Region 2013-17)	Output 1.1.1: Strengthened capacity to integrate and implement policies/strategies for environmental sustainability, disaster risk reduction/management and climate change adaptation and mitigation at national level. Output: 1.1.3: Strengthened national capacity for effective management of natural and water resources, renewable energy, waste, land and land rehabilitation that promote good agricultural practices for conservation of the environment and biodiversity.	
UNDP Strategic Plan E&SD Primary Outcome:	Outcome 1: Growth is inclusive and sustainable, incorporating productive capacities that create employment and livelihoods for the poor and excluded	
Executing Entity:	Solomon Islands Government (SIG): Ministry of Mines, Energy and Rural Electrification (MMERE) – Water Resources Division (WRD).	
Other Partners:	SIG: Ministry of Environment, Climate Change, Disaster Management and Meteorology (MECDM). SIG: Ministry of Health and Medical Services (MHMS) – Environmental Health Division (EHD). SIG: Ministry of Development, Planning and Aid Coordination (MDPAC).	
Pilot Sites:	Taro, Choiseul Province / Gizo, Western Province / Ferafalu, Malaita Province / Santa Catalina, Makira Province / Tigoa, Renbel Province / Tuwo, Temotu Province.	
Financing:	*At endorsement (US$)*	*At completion (US$)*
GEF financing (LDCF):	6,850,000	6,850,000.oo
IA/EA own (UNDP):	6,400,000	*213,000.oo
Government:	37,222,462	*87,850.80
Total co-financing:	43,622,462	*300,850.80
Total Project Cost:	**50,472,462**	**7,150,850.80**
ProDoc Signature (Project start):		17 June 2014
Mid Term Review (MTR) date:		May 2017
Terminal Evaluation (TE) date:		May – June 2019
Operational Closing Date:	Planned: 30 June, 2018	**Actual: 30 June, 2019**

***NOTE:** These Figures were provided by UNDP after review of the Draft TE Report. These all represent extremely significant shortfalls on what was committed at start of Project as listed in the left hand column. Requests for an explanation of these figures from UNDP has not yielded a clear response – the TE team is therefore unable to offer an explanation. This is just one of many examples of serious confusions in the financial reporting of this Project and highlights the need for a forensic financial audit.

PROJECT MAP


✓ 6 Pilot sites
✓ 6 Replica sites
Tuwo
Lata
Temotu Province
Santa Catalina
Kirakira
Makira Province
Malaita Province
Ferafalu
Kwai
HONIARA
Tigoa
Lavagu
Rennel Province
Poroporo
Choiseul Province
Vonunu
Gizo
Western Province
Taro
Legend
Pilot
Replica

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ACKNOWLEDGEMENTS

The TE consultants acknowledge the assistance of the following persons in undertaking the TE:

- Ms Ana Chernyshova, Manager, UNDP Solomon Islands Office (Interim).
- Mrs Joanne Aihunu, RSD Team Leader, UNDP Solomon Islands Office
- Ms Aishath Azza, UNDP Regional Technical Advisor for Climate Change Adaptation.
- Ms Christina Joanna Mitini, RSD Programme Associate, UNDP Solomon Islands Office
- Ms Joy Papao, SIWSAP Project Manager (current).
- Ms Gloria Suluia, SIWSAP Project Manager (previous).
- Mr Robin Ward, SIWSAP Chief Technical Adviser (June 2017 to Jan 2019).
- Mr Rodney Kauramo, SIWSAP Project Engineer.
- Ms Wendy Wara, SIWSAP Finance & Administration Officer.
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- Dr. Melchior Mataki, Permanent Secretary, Ministry of Environment, Climate Change, Disaster Management & Meteorology (MECDM).
- Mr Hudson Kauhiona, Director of Climate Change Division, MECDM.
- Mr Charles Bepapa, Director, Water Resource Division, Minsistry of Mines, Energy & Rural Electrification (MMERE).
- Mr Ted Blessing, Chairman, Community Water Committee, Aurigi (Santa Catalina) Island.
- Mr Jonah Runa, Deputy Chairman, Community Water Committee, Aurigi (Santa Catalina) Island.
- Mr David Runa, Community Warden, Aurigi (Santa Catalina) Island.
- Mr Jeffrey Pakipota, Provincial Secretary, Choiseul Province.
- Mr Nelson Kere, Deputy Provincial Secretary, Choiseul Province.
- All other stakeholders that were consulted during the TE as listed in Annex 2.

ACRONYMS USED

AMAT	Adaptation Monitoring & Assessment Tool (of GEF)
CCA	Climate change adaptation
CCVA	Climate Change Vulnerability Assessments
CLTS	Community Led Total Sanitation
CRISP	(World Bank-GEF) Community Resilience to Climate and Disaster Risk Project
CTA	Chief Technical Adviser (of SIWSAP)
EA	Executing Agency
EU	European Union
FTA	Fixed Term Agreement (UNDP employment contract)
GEF	Global Environment Facility
GA	Groundwater Assessment
IA	Implementing Agency
IVA	Integrated Vulnerability Assessment / Response Plan
LDCF	Least Development Countries Fund
NAPA	National Adaptation Program of Action 2008
NDS	National Development Strategy 2011 - 2020
NWSSP	National Water and Sanitation Sector Plan 2007
M&E	Monitoring and evaluation
MECDM	Ministry of Environment, Climate Change, Disaster Management and Meteorology
MMERE	Ministry of Mines, Energy, and Rural Electrification
MoU	Memorandum of Understanding
MTR	Mid Term Review
NCCWG	National Climate Change Working Group
NIWCC	National Inter-sectoral Water Coordination Committee
PAG	Project Advisory Group (of SIWSAP)
PG	Provincial Government
PM	Project Manager (of SIWSAP)
PMU	Project Management Unit (of SIWSAP)
PPO	Provincial Project Officer (of SIWSAP)
PRF	Project Results Framework
ProDoc	Project Document
RDP	Rural Development Programme (of SIG with multi-donor support)
RTA	Regional Technical Adviser (of UNDP)
SIG	Solomon Islands Government
SIWSAP	Solomon Islands Water Sector Adaptation Project
SLR	Sea level rise
TE	Terminal Evaluation
UNDAF	United Nations Development Assistance Framework
UNDP	United Nations Development Programme
WASH	Water, Sanitation & Hygiene
WRD	Water Resources Division (of MMERE)
WS-CCARP	Water Sector Climate Change Adaptation Response Plan

EXECUTIVE SUMMARY (ES)

ES 1. Brief Project Description

1. The impacts of climate change, particularly sea level rise (SLR) and pronounced droughts have severe consequences on water and sanitation in the Solomon Islands. Due to SLR, low-lying islands, atolls and flat deltaic regions are faced with saltwater intrusion, affecting the groundwater resources and limiting access to freshwater supply. Droughts have severely affected water supplies; during the 1997/1998 droughts that resulted in reduction of freshwater availability in Honiara by around 30-40%. Droughts have also damaged crops and livelihoods. Likewise, climate-related impacts on the quality and quantity of water has a gender dimension; in the context of the ethnic tensions, the safety and security of women and girls are compromised as they need to travel further to collect water, also leading to less time for other activities.

2. In this context, the Solomon Islands Government (SIG), Ministry of Mines, Energy, and Rural Electrification (MMERE) – Water Resources Division (WRD), in partnership with the Ministry of Environment, Climate Change, Disaster Management and Meteorology (MECDM) and the Ministry of Health and Medical Services – Environmental Health Division, and UNDP, embarked on the *Solomon Islands Water Sector Adaptation Projec*t (SIWSAP) from June 2014, with financial support from the Global Environment Facility (GEF) Least Development Countries Fund (LDCF). The four-year project was initially scheduled for completion in June 2018, but was extended for 12 months to end June 2019.

3. The project objective is to improve the resilience of water resources to the impacts climate change and improve health, sanitation and quality of life, so that livelihoods can be enhanced and sustained in the targeted vulnerable areas. SIWSAP has worked with partners to achieve this objective through:

    a) formulating, integrating, and mainstreaming water sector-climate change adaptation response plans in the water-related sectors as well as broader policy and development frameworks,

    b) increasing the reliability and improving the quality of water supply in targeted areas,

    c) investing in cost-effective and adaptive water management interventions and technology transfer; and

    d) improving governance and knowledge management for climate change adaptation in the water sector at the local and national levels.

4. It is intended that by the end of the project, the SIG will have enhanced systems, tools and knowledge for water resource resilience at the national and local levels, which will contribute to the implementation and achievement of national priorities outlined in various policies and strategies, including the:

    a) National Development Strategy (NDS) 2011 - 2020.
    b) National Adaptation Program of Action (NAPA) - 2008.
    c) National Water and Sanitation Sector Plan - 2007.

5. In accordance with UNDP and GEF monitoring and evaluation (M&E) policies and procedures, all full and medium-sized UNDP supported, GEF financed projects are required to undergo a Terminal Evaluation (TE) upon completion of implementation. This report presents the TE for the SIWSAP Project.

ES 2. Key Findings

For the sake of efficiency and use-ability of this report, only six, highest priority key findings are presented. More details on a wider range of issues can be found in the main body of this report.

Key Finding 1 - Project successes and achievements:

- The project has been extremely effective at improving water security and resilience to climate change at both the six pilot sites and the six replica sites, through diversified water supply options, including (depending on the site) rainwater tanks, improved groundwater supply and new and/or rehabilitated wells, as well as early warning systems.

- In addition to building water sector resilience to climate change, the Project has also built water sector resilience to natural disasters, including the 2015 El-Nino related prolonged drought, and the 2017 eruption of Tinakula Volcano in Temotu Province. During the eruption the SIWSAP groundwater desalination plant at Tuwo ensured water security for several neighbouring islands where water supplies had been contaminated by volcanic ash. It is likely that the facilities and systems installed by SIWSAP will play a similar resilience role in future disasters.

- The level of satisfaction with the Project expressed by all community stakeholders consulted during the TE was extremely high. All stakeholders reported that the level of effectiveness of this Project is much higher than for similar related projects that they have been involved with.

- Every stakeholder that was consulted expressed the highest levels of respect and appreciation for the efforts and effectiveness of the two PMs and the PMU as a whole.

- The Project successes have been driven to a large degree by high levels of natural intelligence, enthusiasm, commitment and pure hard work of the two Project Managers (PMs), and the Project Management Unit (PMU) as a whole.

- The Project success has also been very much dependent on very close consultation and coordination, and also hard work from the beneficiary communities, including through the Project Community Water Committees. ***The community engagement aspects of SIWSAP provide a best-practice model for other similar projects.***

- The Project has also benefitted from close coordination and cooperation with relevant SIG ministries and divisions, and with other relevant programs and projects.

- ***Overall, the TE team is of the view that ALL parties involved in SIWSAP deserve the highest commendation.***

Key Finding 2 - Gender and social equity benefits:

- It appears that gender involvement in all SIWSAP activities has been well balanced and in fact has often been unbalanced towards greater involvement of females, including in the PMU.

- At the community level women and girls have benefited significantly by having secure water sources immediately adjacent to or much closer to their residences, reducing time and workload fetching water

and also improving security. Women consulted during the TE expressed high satisfaction and appreciation for this outcome.

- At one community (Santa Catalina) women reported a decrease in water-related diseases amongst children and the elderly as a result of the improved water supply, although we did not verify this anecdotal report with medical records from the community clinic.

- Other social groups including the disabled have benefited from much more convenient access to secure water.

- There have been some issues of social disruption by non-local contractors engaged by the Project to install rain tanks etc, causing problems, including with woman, in the beneficiary community. Concerns were also raised about public access to the rain tank at the Taro Women's Centre.

Key Finding 3 - Quality of products and outputs:

- The TE assesses that the quality of most of the products and outputs delivered by SIWSAP is very high.

- The reports on scientific and technical studies, including the pilot site Climate Change Vulnerability Assessments (CCVAs), Water Sector Climate Change Adaptation Response Plans (WS-CCARPs) and Groundwater Assessments (GAs), and the replica site Integrated Vulnerability Assessment / Response Plans (IVAs), are all found to be scientifically and technically rigorous, professionally written and well presented. As such they provide a strong basis for guiding water sector climate change adaptation at each site and more broadly in each Province. This is a positive finding as often in such projects technical reports can be of poor quality. The PMU and their technical consultants should be commended for ensuring that such high quality was achieved.

- An outstanding observation is that the quality of physical infrastructure built by the project is very high compared to other related projects, including those located immediately adjacent where direct visual comparison can be made. This bodes well for physical sustainability and community stakeholders commented positively on this aspect.

- The Project also produced a number of high quality communication and awareness products, including excellent "Resilient Village" posters, which promote key messages visually through a contextual and culturally appropriate art style.

Key Finding 4 - Adaptive management:

- The PMU and UNDP more generally, as well as the relevant SIG agencies, have demonstrated an outstanding capacity for adaptive management in response to changing circumstances and unexpected developments, which is essential for successful project execution. Significant examples of successful adaptive management applied during the project include, *inter alia*:
    - The "Quick Fix" program was developed to respond rapidly to real community needs during the 2015 El Nino drought period.
    - The Ferafalu land dispute was dealt with effectively – alternative site and solution were found and implemented rapidly.
    - The Project Results Framework (PRF) was adapted after the Mid Term Review (MTR).

- Both UNDP and SIG rapidly mobilized additional resources to plug the unexpected (and unexplained) budget shortfall towards end of 2018.
- For the replica sites, to achieve efficiency and cost-effectiveness the CCVA and WSCCARPs developed for the pilot sites were combined into IVAs.

Key Finding 5 - Project under-achievements:

- Despite the significant successes outlined above, the Project also had some significant under-achievements. As presented in Table A above, of a total of 23 targets (Target 2.1 is split into two for this assessment), 12 targets have been fully achieved, 8 targets have been partially achieved and 3 targets have not (and will not) be achieved by Project-end. This represents:

  - a full achievement rate of 52%
  - a partial achievement rate of 35%
  - a failure rate of 13%

- A failure rate of 13% is high and should be cause for concern and closer examination by UNDP and SIG.

- The main area of under-achievement was a general lack of progress with the project targets relating to sanitation. It was difficult for the TE team to establish the exact reasons for this lack of progress however the following appear to have been key contributing factors:

  - The overall project design was extremely ambitious given the available resources and initial four-year time-line. It was therefore necessary for the PMU to prioritise, with water security and resilience being a logical priority and precursor to addressing sanitation. This is a lesson for project design and adequate resourcing.

  - The general inefficiencies and long delays in UNDP project management, recruitment and procurement processes hampered timely delivery of many key project activities, including a full six month delay between project start and commencement of the PM and initial CTA.

  - Despite the infrastructure focus of the Project, including in relation to improving sanitation, the Project design did not include a Civil Engineer as a PMU staff position. It was not until November 2017 (more than 3 years after project start), after much lobbying by the PM, that a Civil Engineer was engaged. Had this position been in place from project start, greater progress might have been made.

  - Additionally, after departure of the initial CTA in July 2015 (after only six months of duty), the project was without a CTA for nearly two years, until a new CTA commenced in June 2017. It is understood that the reason for this critical gap was that SIG was staunchly opposed to engaging a replacement CTA, because it is an international position (UN level P4). These positions consume a significant part of the project budget, which SIG preferred to allocate to in-country activities. However, given the highly technical nature of the Project, including the sanitation components, there is no doubt that lack of a CTA would have been a major factor in lack of Project delivery. The TE considers that it was a strategic error to have left this key position unfilled for so long.

  - The SIG Ministry of Health & Medical Services had adopted an EU-funded Community Led Total Sanitation (CLTS) policy, which reportedly (and inexplicably) prohibits the application of subsidized sanitation solutions in Solomon Islands communities – and which for some reason

SIWSAP felt obliged to comply with. The TE team cannot fathom the rationale for such a policy, it is extremely clear that in order to improve sanitation in Solomon Islands communities, solutions most definitely need to be subsidized, at least for the capital stages.

- There was also opposition from some communities to some sanitation solutions proposed by SIWSAP for cultural reasons – for example compositing toilets where there is opposition to having to handle by-products, even though they are completely safe. Some communities also stated that communal toilets are not appropriate due to lack of ownership, which means that cleaning and maintenance become a problem. They said that each household should have their own toilet, which they own and therefore care for. On Aurigi (Santa Catalina) Island we were shown a previous community toilet project which had failed for these reasons (Figure 11).

- However, at other communities such as Taro there was full support for the proposed public toilets, and the Provincial Government is extremely dissatisfied that the Project did not deliver on its commitment there.

- The other main area where the Project under-achieved was a general lack of uptake and replication of SIWSAP successes and best practices at the Provincial and National levels. The exact reasons for this are also not clear but almost certainly include some of the factors listed for sanitation above.

- Given the highly ambitious overall workload, it was also necessary for the PMU to focus heavily on the pilot and replica sites in order to make good progress there, at the expense of Provincial and National level activities. This is a lesson for project design and adequate resourcing.

- The TE also notes some non-trivial problems with the engagement of contractors to undertake civil construction works, including:

  - Repetitive, piece-meal contracting procedures to do similar work (vs Standing Panel arrangement from beginning of project).

  - Lack of use of performance-based contracts, where payments are linked to certification of quality delivery of outputs that meet clear technical specifications.

  - At least one case where a contractor did not complete the job, did not pay labourers from the local community, and took the money and "ran off" (it is not clear if UNDP investigated this matter and undertook recovery and punitive action – if not, it should).

  - Use of non-local contractors (from outside the beneficiary community or even Province), reducing flow of jobs and income to local contractors, tradesmen and labour.

  - As outlined above, there have been some issues of social disruption by non-local contractors causing problems, including with women, in the beneficiary community.

Key Finding 6 - Long term sustainability:

- The Project developed an Impact & Sustainability Plan as well as MoUs with National and Provincial Governments and the communities, which are designed to provide the institutional, governance and financial framework for the long-term sustainability of the SIWSAP achievements.

- However, while these are well intentioned and well-formulated on paper, there is often a disconnect between "paper and practice." It was reported that some Provincial Governments are objecting to signing on to the MoUs and have not been particularly supportive during the course for the Project, which does not bode well for sustainability after Project-closure.

- The TE team is most concerned about the technical and financial viability of ongoing, long-term operation and maintenance of the technically complex groundwater desalination/filtration systems that have been installed by the Project, especially given their highly remote and exposed locations.

- Recommendations 3, 4 and 5 below address this concern.

ES 3. Project Achievements Summary

- Total Targets: **23** (Target 2.1 is split into two for this assessment)
- Targets Fully Achieved: **12** (52%)
- Targets Partially Achieved: **8** (35%)
- Targets Not Achieved: **3** (13%)

TABLE A: *Project Achievements Summary*

Objective or Outcome	Indicator	End of Project Targets	Status at TE (June 2019)	TE Notes
Objective: To improve the resilience of water resources to the impacts of climate change in order to improve health, sanitation and quality of life, and sustain livelihoods in targeted vulnerable areas.	**Indicator 1:** Number of Water Sector Adaptation Response developed implemented (aligned with new AMAT Indicator 13).	**Target 1.1:** At least 6 Water Sector Climate Change Adaptation Response Plans developed and implemented which inform relevant provincial and/or national plans.	**Achieved**	• While this has been well achieved for the six Pilot Sites and has informed the new National Water & Sanitation Plan 2018, uptake into relevant provincial plans has not been effective.
	Indicator 2: Number of people directly benefiting from water resources and improvised sanitation that are resilient to climate change impacts (disaggregated by gender) (aligned with new AMAT Indicator 1).	**Target 2.1:** 12,000 people (including at least 5,760 women) in at least 6 sites across 6 Provinces have resilient water supply options and improvised sanitation, with sustainable financing, operation and maintenance plans, and better managed watersheds, including groundwater.	**Achieved for resilient water supply options**	• This has been the major achievement of the Project, mainly through rainwater tanks, desalination/filtration plants for improving groundwater and installing & rehabilitating wells, plus installation of early warning systems.
			Not achieved for sanitation & watersheds	• Progress with sanitation and watershed management was severely hampered by a number of factors – refer section 3.3.1 of this report.
Outcome 1: Water Sector Climate Change Adaptation Response Plans formulated, integrated and mainstreamed in water sector-related and in broader policy and development frameworks.	**Indicator 3:** Number Provincial of plans allocated budget informed by with vulnerability assessments and Water Climate Adaptation Response (aligned with new AMAT Indicators 6 and 13).	**Target 3.1:** At least 6 vulnerability assessments and Water Sector Climate Change Adaptation Response Plans at Pilot Site level developed.	**Achieved**	• The TE considers that the CCA Response Plans are well formulated, technically sound and professionally presented and provide a strong basis for guiding water sector CCA at each site.
		Target 3.2: At least 6 vulnerability assessments and additional Water Sector Climate Change Adaptation Response Plans at replication sites developed (1 per Province).	**Achieved**	• For the replica sites, to achieve efficiency and cost-effectiveness the CCVA and WSCCARPs developed for the pilot sites were combined into IVAs.
		Target 3.3: At least 6 Provincial Plans informed by vulnerability assessments and Water Sector Climate Change Adaptation Response Plans undertaken in pilot and replica sites, including training of relevant Provincial and National Staff.	**Partially achieved**	• As far as could per ascertained by the TE no Provincial Plans were successfully developed, adopted and/or implemented during the period of SIWSAP – and although this was noted by the MTR with recommendations to address, no action was taken. • However, actual development of Provincial Plans was beyond the scope of the Project and the Target was to ensure that the vulnerability

Objective or Outcome	Indicator	End of Project Targets	Status at TE (June 2019)	TE Notes
				assessments and WSCCARPs were developed for the Pilot and Replica Sites that can feed into the Provincial Plans. • Additionally, training was provided to support development of Provincial Plans, which are ultimately the responsibility of the Provincial Governments. • There is a clear need for follow-up support to Provinces to develop Provincial Water Sector Adaptation Plans – e.g. through a SIWSAP Phase 2.
Outcome 2: Increased reliability and improved quality of water supply in targeted areas.	**Indicator 4:** Number of sites adopting sustainable water resources management practices that enable continuous availability of a sufficient quantity of safe drinking water, existing projected change with new AMAT Indicators 1, 2 and 4).	**Target 4.1:** Six sites with increased water storage provides a diversified approach to capturing and storing freshwater safely through island appropriate technologies (100% of communities have regular annual supply)	**Achieved**	• This has been the major achievement of the Project, mainly through rainwater tanks, desalination/filtration plants for improving groundwater and installing & rehabilitating wells, plus installation of early warning systems.
		Target 4.2: At least one pilot site where strategic freshwater reserves are rehabilitated and protected.	**Not achieved**	• While the Project did support Groundwater Assessments at the Pilot Sites, these have not translated to actual rehabilitation or protection of strategic freshwater reserves. • The Project did support design of a new municipal waste dump at Taro (which would help protect groundwater), however this had not been implemented by the time of the TE. • The TE understands that rehabilitation and protection of strategic freshwater reserves was a main objective at Gizo, where strategic freshwater reserves have deteriorated. • However very little progress had been made by SIWSAP on this target at time of the TE.
		Target 4.3: At least four pilot sites with appropriate sanitation technologies (e.g., composting toilets) trialed, to protect groundwater and other sources of water supply, supported through appropriate sanitation mobilisation approaches.	**Partially achieved**	• Progress with sanitation was severely hampered by a number of factors – refer section 3.3.1 of this report. • The Project reportedly constructed three sanitation blocks at the Tuwo Pilot Site including access for disabled people (note TE team did not visit Tuwo to confirm this). • It is not clear to the TE team why **three** sanitation blocks were constructed at Tuwo alone, and **zero** were constructed at other Pilot Sites, when the target was to spread across **all**

Objective or Outcome	Indicator	End of Project Targets	Status at TE (June 2019)	TE Notes
				four Pilot Sites (note the PM is from Tuwo). • At the Kirakira Replica Site one rainwater tank solely for hand-washing was reportedly installed at the Community High School (note TE team did not visit Kirakira to confirm this). • At the Lata Replica Site two rainwater tanks solely to provide water for toilet flushing were reportedly installed at the Community High School) (note TE team did not visit Latra to confirm this).
		Target 4.4: More than 3 sites with key groundwater recharge areas identified, cleaned and/or protected.	**Partially achieved for all 6 sites (double the 3 required)**	• Groundwater recharge areas were identified and assessed for all 6 pilot sites and desalination / filtration systems installed to provide communities with clean groundwater. • No progress was made to protect groundwater recharge areas.
		Target 4.5: Comprehensive diversified and integrated water supply systems established in at least six sites, through at least 20 adaptation response projects (Outcome 3).	**Achieved**	• All 12 pilot and replica sites now have significantly improved water security with increased resilience to climate change through diversified water supply options, including (depending on the site) rainwater tanks, improved groundwater supply and new and/or rehabilitated wells. All individual projects across 12 sites well exceed 20 projects.
	Indicator 5: Number of sites with active Community Based Early Warning Systems in place (aligned with new AMAT Indicator & and 8).	**Target 5.1:** At least 6 sites with Community based Early Warning 'Systems' (CBEWS) in place	**Achieved**	• CBEWS have been installed at 4 pilot sites.
Outcome 3: Investments in cost- effective and adaptive water management interventions and technology transfer.	**Indicator 6:** Number of projects implemented for cost-effective and adaptive water resource management interventions/technologies, based on community driven Water and Adaptation Response Projects with co-financer interventions (aligned with new AMAT Indicators 2 and 4)	**Target 6.1:** At least 20 community driven, designed, developed and implemented Water and Adaptation Response Projects (aligned with co-financer interventions).	**Achieved**	• As per Target 4.5. • All Project interventions at all sites were designed, developed and implemented in very close consultation with the communities, through the Community Committees. • The Project exhibited excellent cooperation, and even direct technical integration with related activities of partners / co-financiers.
		Target 6.2: Appropriate water supply equipment successfully procured and delivered to pilot sites and key disaster stakeholders such as NDMO for enhanced preparation and response to water scarcity.	**Achieved**	• This has been the major achievement of the Project, mainly through rainwater tanks, desalination/filtration plants for improving groundwater and installing & rehabilitating wells, plus installation of early warning.

Objective or Outcome	Indicator	End of Project Targets	Status at TE (June 2019)	TE Notes
Outcome 4: Improved governance and knowledge management for Climate Change Adaptation in the water sector at the local and national levels.	**Indicator 7:** Number of fora held where key stakeholders generate and exchange knowledge generation, and develop policies that facilitate climate change mainstreaming in the water sector (aligned with new AMAT Indicators 5).	**Target 7.1:** A total of 3 National Water and Adaptation Forums held.	Partially achieved	• Only 2 forums were held (2017 National Water Forum and 2018 National Water & Climate Change Forum). • PMU claims that National Feedback Session held in 2016 meets the Target of 3 Forums. • However the TE assessment is that this initial event was very narrow and Project-focused, and does not meet the criteria of a true National Water and Adaptation Forum.
		Target 7.2: One Sanitation and Adaptation Partnership with IWRM participating countries in place.	Not achieved	• The TE understands that the PMU made attempts to partner with Tuvalu but no progressed was made.
	Indicator 8: Number of awareness and knowledge materials on climate change risks and vulnerability of water sector, and appropriate adaptation and response measures produced through the SIWSAP project with national partners providing cross-sector adaptation relevant information (aligned with new AMAT Indicators 5).	**Target 8.1:** One academic/scientific and/or policy publication on the climate change impacts on the water resources of the Solomon Islands.	Partially achieved	• The TE understands that the Project has not produced an academic or scientific publication however the other technical and policy reports produced by the Project are of high quality.
		Target 8.2: At least six site specific guidelines and one national guideline produced for climate resilient water supply and sanitation development and management in vulnerable areas.	Achieved	• Technical guidelines produced by the project are of high quality.
		Target 8.3: One National Sanitation Campaign with partners designed and implemented to reach more than 20% of national population.	Partially achieved	• The project implemented a comprehensive, professional and multi-faceted communication strategy and awareness campaign, however this was focused on water security and resilience rather than sanitation, and it is not clear that it reached >20% of the population.
		Target 8.4: Six Peer-to-Peer Learning Network established across Pilot and Replication Sites (Outcome 2).	Partially achieved	• Peer-to-Peer Learning was effected through the National Water Forums. • However, these were limited, one-off events and an ongoing, sustainable, peer-to-peer learning network has not been established.
		Target 8.5: One National Diploma on Water and Adaptation with Solomon Islands National University (SINU) in place.	Partially achieved	• After engaging with SINU it was decided to add Water and Adaptation to existing environmental courses rather than develop a new diploma. • Training modules developed by SIWSAP are available, but formalization into relevant SINU courses is yet to occur. • This should be an objective by Project end.
		Target 8.6: 4 sites with hydrological monitoring equipment installed to improve and expand current national hydrological monitoring network.	Achieved for all six pilot	• The Community Based Early Warning Systems (CBEWS) include hydrological monitoring, linked to the national network.

Objective or Outcome	Indicator	End of Project Targets	Status at TE (June 2019)	TE Notes
			sites	

		Target 8.7: At least two creative and/or audio-visual products are produced utilizing participatory communications approaches to communicate, train, influence and provide learning from the project (participatory video, video diaries, theatre, music, etc).	**Achieved**	• A series of participatory videos were developed by SIWSAP, including:
				  ○ How to make a culvert.
				  ○ How to make a water pump.
				  ○ How to make a handbag out of plastic wastes.
				  ○ How to make a bucket tap.
				  ○ How to make a cyclone shelter.
				• In addition films for each Pilot Site were produced by Torn Parachute, including interviews with communities on CC impacts and water resources.

ES 4. Evaluation Ratings

TABLE B*: Evaluation Ratings*

Component	Rating	Reasons for rating
1. Monitoring & Evaluation (M&E)		
1.1 M&E Design	**Highly Satisfactory**	• The Project Document (ProDoc) and its Project Results Framework (PRF) included a comprehensive, well developed M&E Plan with clearly articulated baselines and end-of-project targets and embracing both quantitative and qualitative indicators. • The M&E framework set out in the PRF was aligned with the GEF Climate Change Adaptation Tracking Took (the Adaptation Monitoring & Assessment Tool - AMAT) and broader UNDP M&E Frameworks. • The M&E plan included using the UNDP ATLAS system to regularly update the Project risk analysis and to identify, report and act on any increasing risks, including financial risks. • The M&E plan also included a requirement for financial audits in accordance with UNDP financial rules, regulations and policies. • The M&E budget in the ProDoc was within the required 5% of total GEF funding allocation for the Project, which is adequate to allow proper M&E without diverting disproportionate funding resources away from implementation of technical activities. • *Overall, the TE consultants consider that the M&E design as contained in the ProDoc is a good example of how a proper M&E Plan should be formulated, and can be used as a model for other similar projects, subject to some improvements as outlined in section 3.1.1 of this report.*
1.3 Overall quality of M&E	**Satisfactory**	• Combining a rating of **Highly Satisfactory** for M&E Design (at entry) with a rating of **Moderately Satisfactory** for M&E Plan Implementation, and considering the significance of the budget monitoring issues outlined above, a rating of **Satisfactory** is allocated for overall quality of M&E.
2. IA& EA Execution		

2.1 Quality of UNDP Implementation	**Moderately Satisfactory**	• The role of UNDP in this project included being both the Implementing Agency (IA) for GEF and the Executing Agency (EA) for the National Government (at the request of SIG), with the PMU being employed directly by UNDP but housed in the lead SIG Ministry (Water Resources Division of the Ministry of Mines, Energy and Rural Electrification - MMERE).
		• Standard UNDP policies and procedures were used for all recruitment, procurement, project management and financial management.
		• Many positive aspects of UNDP's implementation of the Project were reported by stakeholders consulted during the TE, including:
		  ○ Both the UNDP Solomons Office and the PMU were highly active in driving and supporting the Project Board (PB) and were fully engaged in all aspects of the project from design and inception onwards, providing strong levels of support ranging from high-level strategic issues to detailed technical and administrative issues.
		  ○ Feedback was that PMU staff maintained an "open-door" policy whereby they could be approached for advice, assistance and support on any issue at any time.
		  ○ Satisfaction was also expressed with the level and quality of technical support provided by the UNDP Regional Technical Adviser (RTA) and the second Chief Technical Adviser (CTA) and other technical staff (although in the first half of the Project SIG officials questioned the value for money of the first CTA which resulted in an unacceptable 22 month period without a CTA).

Component	Rating	Reasons for rating
		○ A major and highly commendable positive in UNDP's implementation of this Project was the emergency allocation of US$XXX to help cover the unexpected (and as yet unexplained) budget shortfall at the end of 2018, thus allowing project completion to June 2019 (although it could be argued that because the shortfall was caused by a lapse in effective budget monitoring and management by UNDP, then it was UNDP's responsibility to plug this gap). • Some key dissatisfactions and deficiencies with UNDP implementation were reported, including the following: ○ Without fail every stakeholder that was consulted during the TE identified slow and bureaucratic UNDP recruitment and procurement practices as being the most significant cause of delay to project implementation – with some processes taking many months. This was most likely a main contributing factor to the non-achievement of key project components such as sanitation (see below). ○ There was a full six months delay from project-start to both the PM and CTA assuming duties – which is a huge setback for a project with an original time-frame of only 4 years. UNDP should endeavor to have all PMU staff fully engaged within 3 months of project start. ○ The Project was completely without the key CTA position for nearly two years (22 months) right during the middle of the main implementation period, reportedly mainly due to opposition from SIG to recruiting international experts. Attempts were made to recruit a CTA on a contract basis, which were unsuccessful, and this was switched to Fix Term Assignment (FTA) at P4 level, which was eventually successful in recruiting the last CTA. This process is assessed as being inefficient and a significant factor in limiting Project performance. ○ The multiplicity of UNDP offices involved and the need for requests and approvals to be channeled back and forth between these offices before actions could be implemented on-the-ground added to delays and frustrations (relevant UNDP offices include the PMU housed within MMERE, the UNDP Solomons Office, the UNDP Pacific Office in Suva and the UNDP Regional Hub in Bangkok, as well as the UNDP RTA located in Sydney but reporting to the Regional Hub in Bangkok, adding further to the complexity and inefficiency of lines of communication). ○ ***It is strongly recommended that UNDP should take a very serious look at streamlining its project management, recruitment and procurement procedures to drastically improve efficiency of delivery of such projects.*** ○ The significant lapses in budget monitoring and management outlined above also detract from the quality of UNDP's implementation.
2.2 Quality of Execution - Executing Agency	**Satisfactory**	• As outlined above UNDP was both the IA and the EA and the comments on the quality of UNDP's implementation under 2.1 also apply to this section. • Some additional, tactical-level comments relating to the performance of the PMU, as the main "executer", are also provided. • All PMU staff and especially the two Project Managers (PMs) exhibited extremely high levels of enthusiasm, commitment, work ethic and management capability, effectiveness and efficiency. • Every stakeholder that was consulted by the TE team expressed the highest levels of respect and appreciation for the efforts and effectiveness of the two PMs and the PMU, and expressed strong appreciation for the project as a whole, which overall is seen by all stakeholders as highly beneficial. • The PMU developed and followed clear and detailed workplans, and most project outputs and targets have been achieved (especially rating to improving the resilience of water security), which is the most important indicator of the quality of execution (although there are some significant gaps such as sanitation – see below). • The results of M&E activities including the MTR have been effectively taken on by the PMU and the project design and implementation have been effectively adapted as required. • The PMU and UNDP more generally, as well as the relevant SIG agencies, have demonstrated an outstanding capacity for adaptive management, which is essential for successful project execution. Outstanding examples of successful adaptive management applied during the project include, *inter alia*: ○ The Quick Fix program was developed to respond rapidly to real community needs during the 2015 El Nino drought period. ○ The Ferafalu land dispute was dealt with effectively – alternative site and solution were found and implemented rapidly.

Component	Rating	Reasons for rating
		○ The PRF was adapted after the MTR. ○ The unexpected budget depletion in 2018 was resolved seamlessly with rapid mobilization of additional contributions from UNDP and SIG. • Some key dissatisfactions and deficiencies with UNDP execution were reported, including: ○ Project organization and reporting arrangements and collaboration with SIG and other partners were weak during the first half of the project, although this appears to have been addressed after the MTR. ○ For some Provinces, beneficiary communities reported poor engagement, communication and support from both the UNDP-contracted Provincial Project Officers (PPOs) and from the Provincial Governments (PGs) themselves. • There are some other areas where the quality of execution could have been improved, and these are described below under 3 - Assessment of Outcomes – "Effectiveness" and also "Efficiency".
2.3 Overall quality of I/E	**Satisfactory**	• Combining the IA and EA ratings in 2.1 and 2.2 could result in an "overall" rating of Moderately Satisfactory. However given that every stakeholder that was consulted by the TE team expressed strong appreciation for the Project, which overall is seen by all stakeholders as highly beneficial, despite some of the non-trivial problems reported, we allocate an overall rating for the quality of Implementation and Execution (I/E) of Satisfactory.
3. Assessment of Outcomes		
3.1 Relevance	**Relevant** (we would rate as "Highly Relevant" but this category is not available).	• All project components, outcomes & outputs are assessed as being highly relevant to: ○ GEF CCA Focal Area Objectives: ▪ CCA-1: Reduce vulnerability to the adverse impacts of CC, including variability, at local, national, regional and global levels. ▪ CCA-2: Increase adaptive capacity to respond to the impacts of CC, including variability, at local, national, regional and global levels. ▪ CCA-3: Promote transfer and adoption of adaptation technology. ○ UNDAF (Pacific Region 2013-17) Outcome 1.1: By 2017 the most vulnerable communities across the PICTs are more resilient and select government agencies, civil society organizations and communities have enhanced capacity to apply integrated approaches to environmental management, climate change adaptation/mitigation and disaster risk management. ○ UNDAF (Pacific Region 2013-17) Outputs: ▪ Output 1.1.1: Strengthened capacity to integrate and implement policies/strategies for environmental sustainability, disaster risk reduction/management and climate change adaptation and mitigation at national level. ▪ Output: 1.1.3: Strengthened national capacity for effective management of natural and water resources, renewable energy, waste, land and land rehabilitation that promote good agricultural practices for conservation of the environment and biodiversity. ○ UNDP Strategic Plan E&SD Primary Outcome: Outcome 1: Growth is inclusive and sustainable, incorporating productive capacities that create employment and livelihoods for the poor and excluded ○ SIG National Development Strategy (NDS) 2011 - 2020, National Adaptation Program of Action (NAPA) 2008 & National Water and Sanitation Sector Plan - 2007. ○ Provincial and community needs and priorities. • The Project is also found to be highly relevant to most of the UN Sustainable Development Goals (SDGs) (refer section 3.3.5 of this report).

Component	Rating	Reasons for rating
3.2 Effectiveness	Overall Project Objective **Satisfactory**	• It is very clear that the Project has been extremely successful in achieving the overall objective to improve the resilience of water resources to the impacts of climate change in order to improve health, sanitation and quality of life, and sustain livelihoods, in the targeted vulnerable areas. • We would have considered an Effectiveness Rating of Highly Satisfactory however at June 2019 (near Project end) a number key targets have only been partially achieved and some have not been achieved at all, and will not be achieved by Operational Project Closure at end of June (especially those relating to sanitation and Provincial- and National-level uptake) (refer Table A: Project Achievements Summary). • The Project will continue to complete the following Replica Site activities into July and August 2019: o Vonunu rain water tank installations to be completed in July (SIG funding) o Kirakira rain water tanks to be completed in July. o Fiu desalination ans small-scale reticulation to be completed in July. o Kwai rainwater tanks and hand dug wells rehabilitation to be completed in July. o Lata rainwater tanks to be completed in August o Poroporo rainwater tanks to be completed in August
	Targets relating to improving water security and resilience to climate change: **Highly Satisfactory**	• The project has been extremely effective at improving water security and resilience to climate change at bot the six pilot sites and six replica sites, through diversified water supply options, including (depending on the site) rainwater tanks, improved groundwater supply and new and/or rehabilitated wells, as well as early warning systems. • The level of satisfaction with the Project expressed by all community stakeholders consulted during the TE is extremely high. • All stakeholders reported that the level of effectiveness of this Project is much higher than for similar projects that they have been involved with.
	Targets relating to sanitation and Provincial- and National-level uptake: **Unsatisfactory**	• Unfortunately, for a number of reasons as discussed in section 3.3.3 of this report, the Project was not effective at all in delivering on those components relating to sanitation and Provincial- and National-level uptake. • Please also refer Table A: Project Achievements Summary.
3.3 Efficiency	**Moderately Satisfactory**	• Overall it appears that the Project has been reasonably efficient, including: o Co-opting all relevant government agencies through cross-sectoral, inter-ministerial arrangements. o Strong utilization of community commitment and energy (although expecting too much without payment can back-fire later). o At least at some sites, good integration with other related initiatives. • However, some significant in-efficiencies were noted, e.g.: o Long delays (up to months) with UNDP recruitment and procurement processes. o Repetitive, piece-meal contracting procedures to do similar work (vs Standing Panel arrangement from beginning of project). o No preference given to using local contractors and labour (the UNDP procurement procedure can include local content as selection criteria). o Social disruption issues when contractors came into communities from other areas – including allegations of extremely serious infringements by outside contractors within the host communities – including of a drunken, violent and sexual nature – these contractors were engaged directly by UNDP and UNDP MUST take full responsibility to prevent and address such social disruptions in its projects, in accordance with its own UNDP Social & Environment Standards (SES).

Component	Rating	Reasons for rating
		○ Co-financing is way below the original commitment of US$43.6 million (an overall shortfall of $43.3 million – which is extreme). ○ Apart from Rennell, almost no engagement with private sector (private sector was only engaged as a supplier, not as a contributing partner).
3.4 Impact	Targets relating to improving water security and resilience to climate change: **Significant**	• It is very clear that the Project has had a very significant impact in improving water security and resilience to climate change at the individual community level (12 pilot and replica sites).
	Targets relating to sanitation and Provincial- and National-level uptake: **Negligible**	• The Project has had very minor impact with regard to its sanitation targets. • The Project has had very little impact at the broader Provincial and National levels (which raises the vital need for a Phase 2 Project to facilitate up-scaling and Provincial and National level replication of Phase 1 successes).
3.5 Overall Project Outcome Rating	**Satisfactory**	• As outlined in Table A, of a total of 23 targets (Target 2.1 is split into two for this assessment), 12 targets have been fully achieved, 8 targets have been partially achieved, and 3 targets have not (and will not) be achieved by Project-end. This represents: ○ a full achievement rate of 52% ○ a partial achievement rate of 35% ○ a failure rate of 13% • Given the extremely high level of satisfaction with the Project that was expressed by all community stakeholders consulted during the TE, if were not for the various issues identified against the various categories above, the Project could theoretically have achieved at Overall Project Outcome rating of Highly Satisfactory. However, according to the UNDP-GEF Rating Scales, a Highly Satisfactory rating requires that there are no shortcomings at all, which is virtually impossible for any project. In the real world nothing can ever be 100% perfect, and there were some shortcomings identified for this project, including a full target achievement rate of only 43.5%, as outlined above. • **Overall, the TE is if the view that ALL parties involved in this Project deserve the highest commendation.**
4. Sustainability		
4.1 Financial resources	**Moderately Unlikely**	• The TE team could find no evidence that National and Provincial Governments have committed sufficient financial resources to ensure ongoing, long-term (10-20 year) operation and maintenance of the facilities that have been installed at the 12 pilot and replica sites under SIWSAP.
4.2 Socio-political	**Likely**	• Given the extremely high level of satisfaction with the Project that was expressed by all community stakeholders consulted during the TE, and the fundamental importance of water security and resilience, as well as sanitation, to all levels of society, it is likely that there will continue to be ongoing, strong socio-political support for sustaining the SIWSAP achievements – especially at the community level. • However, this is likely to be constrained by lack of financial and technical resources and support, especially given the highly technical nature of some of the equipment that has been installed (desalination plants etc).

Component	Rating	Reasons for rating
4.3 Institutional framework & governance	**Moderately Likely**	• The Project developed an Impact & Sustainability Plan as well as MoUs with National and Provincial Governments and the communities, which are designed to provide the institutional and governance framework for the long-term sustainability of the SIWSAP achievements. • However, while these are well intentioned and well-formulated on paper, there is often a disconnect between "paper and practice." It was reported that some Provincial Governments are objecting to signing on to the MoUs and have not been particularly supportive during the course for the Project, which does not bode well for sustainability after Project-closure. Turnover of Provincial Governments after elections has been a problem. • One Province - Temotu – stands out as having implemented strong arrangements for sustainability, including: o In Tuwo the communities have agreed to contribute monthly fees of SBD$5 per household and an additional SBD$250 from nearby communities annually for accessing and consuming water from the desalination plants. This is to cater for consumables and basic repairs. o The Temotu Provincial Government has agreed to pay for mission costs of SIG officers SBD$10,000 per year. However, this has not been rolled out to the other 11 sites (it is noted that the PM is from Tuwo). • Communities reported that they felt that the level of technical training provided in operation and maintenance of the desalination plants and other equipment was too narrow and not sufficient, and much more detailed and comprehensive training, including training of additional people to create redundancy, is needed. • While UNDP reports that 3 to 5 community members were provided with basic training at each site, the communities told us that in many cases only 1 trained person is available, and in one case when this person was away for over a month – water shortages occurred as there was nobody else available to operate the desal-plant. • Communities also reported that there has been zero training of community members in maintenance of some key components, such as the solar power plants that run the desalination plants. It is understood that the Energy Division of MMERE is supposed to assume responsibility for long-term maintenance for he solar panels, however we have not seen any formal, signed arrangement for this. As MMERE is located in Honiara, it would be more effective and responsive to have trained on-site community members in this. • ***In order to enhance the prospects for long-term sustainability, is strongly recommended that the need for additional training be addressed before project closure.***
4.4 Environment	**Likely**	• Apart from unsustainable logging in water catchments, the main environmental threat to water security in the Solomon Islands is climate change. • Adapting to and building resilience against climate change is the primary objective of this Project, which has been well achieved at the 12 pilot and replica sites, thereby boding well for the environmental sustainability of the Project.
4.5 Overall likelihood of sustainability	With a Phase 2 project: **Likely**	• In order to build on the outstanding achievements and best-practice models established by SIWSAP in relation to community-level water security and climate change resilience, and to also address the lack of progress with some targets, it is strongly recommended that UNDP work with SIG to develop a Phase 2 project to facilitate up-scaling and Provincial and National level replication of Phase 1 successes. • The TE is concerned that without a Phase 2 project the prospects for sustainability will be diminished and the outstanding achievements and best-practice models established by SIWSAP will be lost.
	Without a Phase 2 project: **Unlikely**	

ES 5. Priority Recommendations

For the sake of efficiency and to increase the likelihood that recommendations will be adopted and implemented, we have restricted the number of recommendations to a maximum of the five highest priority issues that were identified during the TE. More details on a wider range of issues can be found in the main body of this report.

TABLE C: *Priority Recommendations*

Underlying Issue	Recommendation
1. UNDP implementation efficiency: • Without fail every stakeholder that was consulted during the TE identified slow and bureaucratic UNDP recruitment and procurement practices as being the most significant cause of delay to project delivery – with some processes taking many months. • This was most likely a main contributing factor to the non-achievement of key project components such as sanitation and uptake at Provincial ands National levels. • The multiplicity of UNDP offices involved and the need for requests and approvals to be channeled back and forth between these offices before actions could be implemented on-the-ground added to delays and frustrations (relevant UNDP offices include the PMU housed within MMERE, the UNDP Solomon Islands Office, the UNDP Pacific Office in Suva and the UNDP Asia-Pacific Office in Bangkok, as well as the UNDP RTA located in Sydney).	**Recommendation 1 -** UNDP implementation efficiency: • ***It is strongly recommended that UNDP should take a very serious look at streamlining its project management, recruitment and procurement procedures to drastically improve the efficiency and timeliness of delivery of such projects.***
2. Need for forensic financial audit: • Although the M&E plan required UNDP to use the ATLAS system to regularly update the project risk analysis and to identify, report and act on any increasing risks, including financial risks, UNDP failed to track the significant over-expenditure of the project budget in 2018, which resulted in a major and unexplained short-fall of circa US$623K by end 2018. This is a large sum of money, representing circa 10% of the total $6.8 funding from GEF. • This shortfall necessitated the seeking of emergency funding from other UNDP sources and from SIG in order to complete the Project. • The TE was not able to obtain a clear and complete explanation for how this situation occurred, or where the missing funds went.	**Recommendation 2 -** Forensic financial audit: • ***Given the significance of the unexplained 2018 over-spend, it is strongly recommended that at closure the Project should be subjected to a highly detailed, forensic financial audit by independent, external auditors, including tracing all expenditure trails.*** • ***The audit findings should be used to inform appropriate response actions, including funds recovery and punitive action should any wrongdoing be identified.***
3. Need for enhanced training before project closure: • Communities reported that they felt that the level of technical training provided in the operation and maintenance of the desalination plants and other technical equipment was too shallow, too narrow and not sufficient, and much more detailed	**Recommendation 3 -** Enhanced training before project closure: • ***In order to enhance the prospects for long-term sustainability, is strongly recommended that the need for additional training be addressed before project closure.***

Underlying Issue	Recommendation
and comprehensive training, including training of additional people to create redundancy, is needed (at one site the absence of the only person trained in operation of the plant over the Easter period resulted in critical water shortages – clearly there needs to be a team of trained people at each community). • They also reported that there has been zero training in maintenance of some key components, such as the solar panels and power plants that run the desalination plants. It is understood that the Energy Division of MMERE is supposed to assume responsibility for long-term maintenance for he solar panels, however we have not seen any formal, signed arrangement for this. As MMERE is located in Honiara, it would be more effective and responsive to have trained on-site community members in this.	
4. Lessons for future similar projects: The SIWSAP project has provided a number of positive lessons and highly successful best practice models that can be adopted and applied for future similar projects, including *inter alia*: • In the foundational stages the Project put strong emphasis on undertaking scientifically and technically rigorous studies and assessments to inform the planning, development and implementation of project interventions. • The Project put a strong focus on ensuring quality and durability of any physical infrastructure that was built, helping to ensure community satisfaction and sustainability. • The community engagement and involvement aspects of SIWSAP provide a best-practice model for other similar projects. • The Project demonstrated the importance and benefits of close coordination and cooperation with relevant government ministries and agencies, and with other relevant programs and projects. • The Project demonstrated an outstanding capacity for adaptive management in response to changing circumstances and unexpected developments, which is essential for successful project execution. • The Project has developed, implemented, demonstrated, documented and communicated model best-practices for community-level water security and climate change resilience, which should be replicated and up-scaled at the Provincial, National and even Regional levels. The SIWSAP project has also highlighted a number of problems and pitfalls that should be learned from so as to avoid similar problems in future projects, including *inter alia*: • The Project design was overly ambitious relative to the timeframe and budget available – making it difficult to achieve all Project targets. Project design should be proportionate and realistic relative to the available budget and timeframe.	**Recommendation 5 -** Lessons for future similar projects: • ***It is recommended that the lessons gained from SIWSAP as outlined in the left-hand column should be adopted and applied by both UNDP and SIG for future similar projects.***

Underlying Issue	Recommendation
• The Project budget in the project design failed to properly account for the very high costs of freight transport in the Solomon Islands, despite the fact that the Project required shipping large numbers of water tanks and building materials to remote areas. Project budgets as contained in the Project design should be properly aligned and costed to the planned activities. • The staffing arrangements in the project design were not appropriate to the Project objectives and targets – including lack of a Civil Engineer position in an infrastructure-focused project. Staffing arrangements should be relevant and appropriate to the project design. • Implementing agency recruitment and procurement processes were extremely slow causing significant delays to project delivery. Implementing agencies must streamline such processes so as to ensure timely delivery of projects within set timeframes. • Contracting arrangements did not maximize benefits to local communities, were open to fraud and abuse, and should have been based on performance-based contracts, where payments are linked to certification of quality delivery of outputs that meet clear technical specifications.	
5. Need for Phase 2 project: • SIWSAP has only targeted 12 communities while there are over 5,000 villages in the Solomon Islands. • Given the outstanding achievements and best-practice models established by SIWSAP in relation to community-level water security and climate change resilience; and the huge benefits that would accrue by much larger up-scaling and replicating across the country, the TE team is astounded that UNDP and SIG have not made any plans or preparations to seek funding for a Phase 2 project. • The TE is concerned that without a Phase 2 project the prospects for sustainability will be diminished and the outstanding achievements and best-practice models established by SIWSAP will be lost.	**Recommendation 4 -** Need for Phase 2 project: • ***In order to build on the outstanding achievements and best-practice models established by SIWSAP in relation to community-level water security and climate change resilience, and to also address the lack of progress with some targets, it is strongly recommended that UNDP work with SIG to develop a Phase 2 project to facilitate up-scaling and Provincial and National level replication of Phase 1 successes.*** • ***Given the strong climate adaptation focus of SIWSAP, the Green Climate Fund (GCF) might be a suitable partner for a much larger SIWSAP Phase 2 (circa US$50 million), and Annex 6 of this report contains the GCF Concept Note template, for consideration and potential use by UNDP and SIG.***

1. INTRODUCTION

1.1 Objectives of the Terminal Evaluation

1. The Terminal Evaluation (TE) was undertaken in accordance with the Terms of Reference (ToR) contained in Annex 1, and in accordance with *UNDP Guidance for Conducting Terminal Evaluations of UNDP-supported, GEF-financed Projects* (the UNDP-GEF TE Guidelines).

2. The purpose of the TE is to assess the achievement of project results, and draw lessons that can improve the sustainability of benefits from this project and aid in the overall enhancement of UNDP programming.

1.2 TE scope & methodology

1. The TE assessed the project against the criteria of **relevance, effectiveness, efficiency, sustainability** and **impact,** as defined and explained in the *UNDP Guidance for Conducting Terminal Evaluations of UNDP-supported, GEF-financed Projects.*

2. A set of Evaluation Questions (EQs) covering each of these criteria were drafted and used as the basis of interviews during the TE. These are included in Annex 1.

3. The TE was designed to provide evidence-based information that is **credible**, **reliable** and **useful**. The TE team followed a **participatory** and **consultative** approach ensuring close engagement with government counterparts, in particular relevant UNDP staff, the PMU and key stakeholders, as contained in Annex 2.

4. The TE included a field mission to the Solomon Islands from 22 May to 1 June 2019, including meetings in Honiara and visits to a representative sample of two of the six Project Pilot Sites (***Taro Island*** in Choiseul Province as an example of a "town" site and ***Santa Catalina Island*** in Makira Province as an example of a "rural" site) (refer Figure 1). Interviews were held with stakeholders as per the schedule in Annex 3.

5. The TE team reviewed all relevant sources of information, including the Project Document, project reports including Annual Project Reviews (APRs) and Project Implementation Reviews (PIRs), project budget revisions, Midterm Review (MTR) report, the GEF focal area tracking tools, project files, national strategic and legal documents, and any other materials that the TE team considered useful for this evidence-based assessment. A list of documents sighted is contained in Annex 4.

6. The TE team assessed the key financial aspects of the project, including the extent of co-financing planned and realized. Variances between planned and actual expenditures were assessed.

7. Wherever possible, triangulation (use of multiple, cross-checked sources of information) was applied to verify and substantiate information reported and to help overcome bias that may arise from single sources of information. For example, if a stakeholder reported a certain view on an issue, views on the same issue were actively sought from other stakeholders during separate interviews, and the view was only reported as a TE finding if three or more stakeholders shared that view. When stakeholders reported views on matters that could be checked in documents – the relevant documents were subsequently checked (e.g. several stakeholders reported concerns about the quality of research reports commissioned by the Project – so the TE team reviewed a selection of the reports, and found them to be of high quality).

Conversely, when a document reported certain findings, these were verified by discussing with stakeholders involved with production and/or review of the document.

8. It was not possible to apply triangulation for some Project parameters, due to lack of alternative data sources, for example finance and co-financing data, and the reports provided by the Project on such data were accepted by the TE team at face value.

9. Assessment of project performance was carried out based against expectations set out in the Project Project Results Framework (PRF), as contained in the Project Document (ProDoc) and revised by the Project after the MTR, which provides Project objectives, targets and indicators with corresponding means of verification. Ratings were assigned for the prescribed Project elements of outcomes, relevance, effectiveness, efficiency, sustainability and impact, in accordance with the Rating Scales shown in Tables 1 and 2, as specified in the UNDP-GEF TE Guidelines.

TABLE 1: *UNDP-GEF Evaluation Ratings Framework*

Evaluation Ratings:			
1. Monitoring and Evaluation	***Rating***	**2. IA& EA Execution**	***Rating***
M&E design at entry:		Quality of UNDP Implementation:	
M&E Plan implementation:		Quality of Execution - Executing Agency:	
Overall quality of M&E:		Overall quality of Implementation / Execution:	
3. Assessment of Outcomes	***Rating***	**4. Sustainability**	***Rating***
Relevance:		Financial resources:	
Effectiveness:		Socio-political:	
Efficiency:		Institutional framework and governance:	
Overall Project Outcome Rating:		Environmental:	
		Overall likelihood of sustainability:	

TABLE 2: *UNDP-GEF Evaluation Rating Scales*

Ratings for Outcomes, Effectiveness, Efficiency, M&E, I&E Execution	***Sustainability Ratings:***	***Relevance Ratings:***
6: Highly Satisfactory (HS): No shortcomings. 5: Satisfactory (S): minor shortcomings. 4: Moderately Satisfactory (MS). 3. Moderately Unsatisfactory (MU): Significant shortcomings. 2. Unsatisfactory (U): Major problems. 1. Highly Unsatisfactory (HU): Severe problems.	4. Likely (L): Negligible risks. 3. Moderately Likely (ML): Moderate risks. 2. Moderately Unlikely (MU): significant risks. 1. Unlikely (U): Severe risks.	2. Relevant (R). 1. Not relevant (NR). ***Impact Ratings:*** 3. Significant (S). 2. Minimal (M). 1. Negligible (N).
Additional ratings where relevant: Not Applicable (N/A). Unable to Assess (U/A).		

1.3 Structure of the TE Report

1. This TE report is structured in accordance with Annex F of the ToR, modified slightly to suit the nature of the Project, as reflected in the Table of Contents of this report.

1.4 Ethics

1. The evaluation was conducted in accordance with the *UNEG Ethical Guidelines for Evaluators*, and the TE team members signed the *Evaluation Consultant Code of Conduct Agreement Form* (see Annex 5).

2. In particular, the TE team aimed to ensure the *anonymity and confidentiality* of individuals who were interviewed and surveyed, with findings presented in a manner that clearly respects stakeholders' dignity and self-worth.

2. PROJECT DESCRIPTION

2.1 Summary overview

1. The impacts of climate change, particularly sea level rise (SLR) and pronounced droughts have severe consequences on water and sanitation in the Solomon Islands. Due to SLR, low-lying islands, atolls and flat deltaic regions are faced with saltwater intrusion, affecting the groundwater resources and limiting access to freshwater supply. Droughts have severely affected water supplies; during the 1997/1998 droughts that resulted in reduction of freshwater availability in Honiara by around 30-40%. Droughts have also damaged crops and livelihoods. Likewise, climate-related impacts on the quality and quantity of water has a gender dimension; in the context of the ethnic tensions, the safety and security of women and girls are compromised as they need to travel further to collect water, also leading to less time for other activities.

2. In this context, the Solomon Islands Government (SIG), Ministry of Mines, Energy, and Rural Electrification (MMERE) – Water Resources Division (WRD), in partnership with the Ministry of Environment, Climate Change, Disaster Management and Meteorology (MECDM) and the Ministry of Health and Medical Services – Environmental Health Division, and UNDP, embarked on the *Solomon Islands Water Sector Adaptation Projec*t (SIWSAP) from June 2014, with financial support from the Global Environment Facility (GEF) Least Development Countries Fund (LDCF). The four-year project was initially scheduled for completion in June 2018, but was extended for 12 months to end June 2019.

3. The project objective is to improve the resilience of water resources to the impacts climate change and improve health, sanitation and quality of life, so that livelihoods can be enhanced and sustained in the targeted vulnerable areas. SIWSAP has worked with partners to achieve this objective through:

    a) formulating, integrating, and mainstreaming water sector-climate change adaptation response plans in the water-related sectors as well as broader policy and development frameworks,

    b) increasing the reliability and improving the quality of water supply in targeted areas,

    c) investing in cost-effective and adaptive water management interventions and technology transfer; and

d) improving governance and knowledge management for climate change adaptation in the water sector at the local and national levels.

4. It is intended that by the end of the project, the SIG will have enhanced systems, tools and knowledge for water resource resilience at the national and local levels, which will contribute to the implementation and achievement of national priorities outlined in various policies and strategies, including the:

    a) National Development Strategy (NDS) 2011 - 2020.
    b) National Adaptation Program of Action (NAPA) - 2008.
    c) National Water and Sanitation Sector Plan - 2007.

5. In accordance with UNDP and GEF monitoring and evaluation (M&E) policies and procedures, all full and medium-sized UNDP supported, GEF financed projects are required to undergo a Terminal Evaluation (TE) upon completion of implementation. This report presents the TE for the SIWSAP Project.

2.2 Development context

1. The project was implemented under the Solomon Islands National Adaptation Programme of Actions (NAPA) of 2008, specifically with respect to Component 2 - "*Water Supply and Sanitation*". The main objective of this component of the NAPA is to increase the resilience of water resources management to impacts of climate change and sea-level rise, by applying hydrology to meet the needs for sustainable development and use of water and related resources; to the mitigation of water-related disasters; and, to effective environmental management in the country.

2. The project was also aligned to the Solomon Islands National Development Strategy of 2011-2020, Objective 7 - "*Effectively Respond to Climate Change and Manage the Environment and Risks of Natural Disasters*".

3. The project is also consistent with Outcome 1 of the United Nations Development Assistance Framework (UNDAF) for the Pacific Island Countries and Territories (PICTS): "*Improved resilience of PICTS, with particular focus on communities through integrated implementation of sustainable environmental management, climate change adaptation/mitigation and disaster risk management*"; and specifically:

    a) UNDAF Output 1.1.1, "*Strengthened capacity to integrate and implement policies/strategies for environmental sustainability, disaster risk reduction- management and climate change adaptation and mitigation at national level*", and

    b) UNDAF Output 1.1.3, "*Strengthened national capacity for effective management of natural and water resources, renewable energy, waste, land and land rehabilitation that promote good agricultural practices for conservation of the environment and biodiversity*".

4. With respect to the UNDP Strategic Plan: 2014- 2017, the project is aligned with:

    a) Outcome 1, ""*Growth is inclusive and sustainable, incorporating productive capacities that create employment and livelihoods for the poor and excluded*"; and

    b) Outcome 3, "*Countries have strengthened institutions to progressively deliver universal access to basic services*".

2.3 Problems that the Project sought to address

1. Potential impacts of climate change on the water sector in the Solomon Islands are likely to be both direct and indirect. Expected increases in the intensity and unpredictability of weather events could result in physical damage of water and sanitation infrastructure, e.g., in the event of floods and storm surges. The indirect impacts would likely gradually exacerbate over time, e.g., more extensive seawater intrusion into scarce freshwater groundwater lens as a result of sea level rise. The main water sector related climate change threats to the well-being of vulnerable communities are as follows:

    a) **Agriculture dependence**: The informal agriculture smallholder sector has always been the foundation of food security and basic livelihoods in the rural parts of the Solomon Islands. Unsustainable land use practices and disruptions in climatic systems are decreasing the availability and reliability of certain ecosystem services, including soil and water resources.

    b) **Geographic and socio-political characteristics**: Certain coastal communities in the Solomon Islands are particularly vulnerable to the adverse effects of natural activities, such as king tides and high swells. This level of exposure also impacts on the status of soil fertility and land use not only in the low-lying atolls (salinization of the soil and shallow freshwater lenses) but also in some of the communities on the larger islands. The pressure from a rapidly increasing population worsens the situation as speed of resource exploitation and land use increases in some of the vulnerable urban township areas. In rural areas, especially remote islands, access to basic services such as health and medical services, water and sanitation, education, telecommunication, technology and transportation is difficult, thus further increasing the degree of vulnerability and sensitivity.

    c) **Physical exposure and sensitivity of the population of the Solomon Islands:** Freshwater resources range from sizeable rivers to small streams, from high mountainous and dense rainforest islands to rainwater harvesting and thin freshwater lens of underground aquifers of the small low-lying atolls and islets. Some of the mountainous islands have fragile and small watersheds dissected by rivers and streams, whereas low lying atolls and islets depend on rainfall and aquifers as the main sources of water. On the bigger and higher islands, the quality of water is deteriorating as a result of logging, mining and slash and burn agriculture, while pollution and salt water intrusion are the biggest threats to water quality and availability on low lying islands.

    d) **Vulnerability of water resources and services**: Coverage of rural water supply and sanitation is poor across most of the Solomon Islands. This has been mainly due to delays in projects, damage to infrastructure during the tensions between 2003 and 2008, and a growing population. Water resources are also vulnerable to pollution, from infiltration of untreated domestic sewage, uncontrolled solid waste disposal, small industry discharges (e.g. fish processing), hydrocarbons, from oil storage tanks, mine drainage and leaching discharges from mine waste, and residues of agricultural fertilizers and pesticides.

    Responding to the expected impacts of climate change is prioritized in the National Development Strategy; however, certain barriers are hindering mainstreaming adaptation into broader development frameworks.

2. The barriers to addressing these threats that the Project sought to overcome were as follows:

    a) **<u>Barrier No. 1</u>: Awareness about climate change risks and response measures in the water**

sector: At the time of project development, there was reportedly limited understanding of the economic and public health importance of safe water at the political level, except during extreme periods such as droughts and flooding when disaster responses are mobilized. Also, the link between climate change and water services was not well understood.

Moreover, the rural water, sanitation, and hygiene (WASH) sector had not considered the climate change implications on the investments they provide. Rural communities are particularly vulnerable to disruptions in services in the event of natural disasters, which are expected to increase in frequency in coming years. Mainstreaming climate change induced disaster management into rural development planning remains a challenge in the Solomon Islands.

b) **Barrier No. 2: Limited infrastructure for timely and accurate dissemination of imminent hydro-meteorological risks:** The scattered geography and weather systems experienced by the Solomon Islands affects both the ability to accurately record rainfall and other climate variables, but also to communicate them in different ways. There is a lack of telemetry data recording across the country. Analysis of information and other variables requires an increase in capacity, limited in part by the number of scientifically qualified people coming into the sector.

Furthermore, communicating this information, in a way that is relevant to all sectors, and taking this information out of the capital and across Provinces for sharing and communicating with people affected does not happen. Land tenure issues related to access to sites, installation, maintenance and protection of equipment is also a problem, limiting the ability to establish a broader network of monitoring. There is also an opportunity to capture the traditional and anecdotal experiences and information present in communities who often explain historical trends and changes through stories and through community discussion.

c) **Barrier No. 3: Capacity for climate-resilient planning, budgeting and monitoring both at local and national levels:** For the water sector, although there has been progress in the knowledge base regarding the potential impacts of climate change, there has been limited integration of climate change adaptation planning into water resource and WASH planning. Limited institutional capacities and lack of monitoring data have restricted implementation of strategies outlined in the NAPA of 2008 and other cross-sectoral adaptation initiatives. Capacities of the provincial administrations are also limited, further constraining advances in mainstreaming climate change adaptation into water sector development planning and budgeting.

2.4 Development objectives

1. The primary objective of this project is "*to improve the resilience of water resources to the impacts of climate change in order to improve health, sanitation and quality of life, and sustain livelihoods in targeted vulnerable areas of the Solomon Islands*". This objective was envisaged to be achieved through the following four, mutually-supporting outcomes, designed to overcome the barriers outlined in Section 2.3:

- **Outcome 1**: Water Sector – Climate Change Adaptation Response (WS-CCAR) plans formulated, integrated and mainstreamed in water sector-related and in broader policy and development frameworks – using action at the Provincial level to mobilize national level policy frameworks.

- **Outcome 2**: The increased reliability and improved quality of water supply in targeted areas.

- **Outcome 3**: Investments in cost-effective and adaptive water management interventions and

technology transfer.

- **Outcome 4**: Improved governance and knowledge management for Climate Change Adaptation in the water sector at both the local and national levels.

2. The focus of Outcome 1 was on water sector climate change adaptation response planning, starting with a water sector vulnerability assessment process and using the integrated water resources management (IWRM) framework as a guiding principle. Water sector climate change adaptation response (WS-CCAR) plans were to be developed for six provinces (Choiseul, Makira, Malaita, Rennell and Bellona, Temotu, and Western) and communities, as well as in replication sites.

3. Under Outcome 2, the WS-CCARPs are being implemented for six project sites, which were selected during the project preparation phase as particularly vulnerable with respect to water security.

4. The six projects sites consist of three urban townships (Gizo, Taro and Tigoa), and three rural communities (Ferafalu, Santa Catalina and Tuwo). The interventions in Outcome 2 are designed to:

    a) enhance the existing water resilience such as diversification of water sources;

    b) protect and restore the ecosystems that protect critical water resources;

    c) improve in water-use efficiency and overall demand-side management;

    d) apply innovative instruments; building on traditional knowledge;

    e) protect freshwater lenses through better sanitation practices in small islands (e.g., dry composting toilets).

5. In addition, community-based Climate Early Warning and Disaster Preparedness Information System tailored for water resources management were implemented at the six project sites.

6. The activities under Outcome 3 were also designed to support the implementation of WS-CCAR plans at the six project sites, and also included investment in additional cost-effective adaptive water management and technology transfer. Strategic investments were planned in water infrastructure in target areas, including but not limited to:

    a) new household and communal water storage systems and infrastructure; and

    b) provision of six water treatment systems for providing additional diversification of potable water supply, including in times when conventional sources are disrupted during natural disasters.

7. These interventions were coupled with training and learning activities, to facilitate good maintenance and system sustainability, which is a crucial aspect of successful implementation and use of the climate adaptive water investments.

8. Outcome 4 focused on improving governance and knowledge management for climate change adaptation in the water sector at the local and national levels.

2.5 Baseline Indicators & expected results

1. The ProDoc included a comprehensive and well-developed Project Results Framework (PRF) embracing both quantitative and qualitative indicators, with description of the baseline situation, end-of-project targets, risks and assumptions and means of verification, which were reviewed and amended slightly after the Mid Term Review (MTR), as presented in Table 3.

2. The PRF was aligned with the GEF Climate Change Adaptation Tracking Took (the Adaptation Monitoring & Assessment Tool – AMAT).

TABLE 3: *Project Results Framework (PRF) (as updated after the MTR May 2017)*

I. PROJECT RESULTS FRAMEWORK

This project will contribute to achieving the following Country Programme Outcome as defined in UNDAF: Improved national, provincial and community preparedness and responsiveness to climate change and disaster risks and sustainable management of natural resources					
UNDAF Outcome Indicators: **1.1.1** – Strengthened capacity to integrate and implement policies/strategies for environmental sustainability, disaster risk reduction/management and climate change adaptation and mitigation at national level **1.1.3** – Strengthened national capacity for effective management of natural and water resources, renewable energy, waste, land and land rehabilitation that promote good agricultural practices for conservation of the environment and biodiversity.					
Primary applicable Key Environment and Sustainable Development Key Result Area (same as that on the cover page, circle one): 3. Promote climate change adaptation					
Applicable GEF Strategic Objective and Program (GEF Cycle 5): CCA-1: 'Reduce vulnerability to the adverse impacts of climate change, including variability, at local, national, regional and global levels' CCA-2: 'Increase adaptive capacity to respond to the impacts of climate change, including variability, at local, national, regional and global levels' CCA-3: 'Promote transfer and adoption of adaptation technology'					
Applicable GEF Expected Outcomes (GEF Cycle 5): Outcome 1.1: Mainstreamed adaptation in broader development frameworks at country level and in targeted vulnerable areas Outcome 1.2: Reduced vulnerability in development sectors Outcome 2.1: Increased knowledge and understanding of climate vulnerability and change – induced risks at country level and in targeted vulnerable areas Outcome 2.2: Strengthened adaptive capacity to reduce risks to climate-induced economic losses Outcome 2.3: Strengthened awareness and ownership adaptation and climate risk reduction processes at local level Outcome 3.1: Successful demonstration, deployment and transfer of relevant adaptation technology in targeted areas					
Applicable GEF Outcome Indicators (GEF Cycle 5): Outcome 1.1: Outcome Indicator 1.1.1: Adaptation actions implemented in national/sub-regional development frameworks (no. and type) Outcome 1.2: Outcome Indicator 1.2.3 Number of additional people provided with access to safe water supply and basic sanitation services given existing and projected climate change (disaggregated by gender) Output 1.2.1: Output Indicator 1.2.1.4: Sustainable drinking water management practices introduced to increase access to clean drinking water (type and level) Examples: Tube wells • Rainwater harvesting • Purification • Water storage • Other Outcome 2.1: Output Indicator 2.1.1.2: Risk and vulnerability assessments conducted and updated Outcome 2.2: Output Indicator 2.2.2.1: % of population covered by climate change risk measures (disaggregated by gender) Outcome 2.3: Outcome Indicator 2.3.1: % of targeted population awareness of predicted adverse impacts of climate change and appropriate responses (Score) – Disaggregated by gender. The score ranges from 1 to 3 and below are the explanations of the rankings based on survey results - 1. No awareness level (<50% correct) 2. Moderate awareness level (50- 75%) 3. high awareness level (>75% correct) Outcome 3.1: Outcome Indicator 3.1.1: % of targeted groups adopting adaptation technologies by technology type (disaggregated by gender)					
	Indicator	**Baseline**	**Targets** **End of Project**	**Source of verification**	**Risks and Assumptions**
Project Objective[1] To improve the resilience of water resources to the impacts of climate change in order to improve health,	1. Number of Water Sector Climate Adaptation Response Plans developed and implemented (aligned with new AMAT Indicator 13)	• No adaptation plans or adaptation guidance exists for the water sector at the National or Provincial levels (including both for water resources and water supply, sanitation and hygiene) • Water and adaptation responses are not integrated into national	1.1 At least 6 Water Sector Climate Change Adaptation Response Plans developed and implemented which inform relevant provincial and/or national plans	• Project reports and technical outputs. • Assessments of National Water and Sanitation Policy and Implementation Plan and provincial level plans to see whether they include water adaptation and associated budget allocations.	**Assumptions** • Willingness amongst stakeholders and projects to share climate related information • Pilot Site Communities and Stakeholders remain willing to be involved in the project

[continued next pages]

TABLE 3: *PRF continued*

sanitation and quality of life, and sustain livelihoods in targeted vulnerable areas		policy or on the ground actions • NAPA is implemented mainly through development partner projects – no national learning mechanism in place		• Meeting minutes, outputs from water and adaptation fora. • Mid-term and terminal evaluation reports	• Adequate support from all the Provincial Administrations to implement project activities (sometimes jointly) • Climate and natural disasters do not hinder project activities and logistics
	2. Number of people directly benefiting from water resources and improvised sanitation that are resilient to climate change impacts (disaggregated by gender) (aligned with new AMAT Indicator 1)	• Rural water supply and sanitation is focused on service delivery and not medium to long term sustainability of water resources and supplies • Insufficient attention is paid to protection / restoration of natural infrastructure capturing, storing, cleaning and conveying water	2.1 12,000 people (including at least 5,760 women) in at least 6 sites across 6 Provinces have resilient water supply options and improvised sanitation, with sustainable financing, operation and maintenance plans, and better managed watersheds, including groundwater	• Project reports and technical outputs • Assessment of the quality and effectiveness of operation and maintenance plans • Assessment of whether and how watershed, including groundwater, are better managed and protected including water quality testing. • Mid-term and terminal evaluation reports	• National Security situation remains stable and improving • Rural WASH and Climate Change Adaptation remain a priority for Government **Risks** • Weather impedes travel to some Provinces • Insufficient ownership and collaboration with Pilot Site communities and other beneficiaries • National economic situation is not able to allocate adaptation related components in budgets at end of project • Sectoral uptake of water adaptation planning is low
Outcome 1[2] Water Sector – Climate Change Adaptation Response plans formulated, integrated and mainstreamed in water sector-related and in broader policy and development frameworks	3. Number of Provincial plans with allocated budget informed by vulnerability assessments and Water Sector Climate Change Adaptation Response Plans (aligned with new AMAT Indicators 6 and 13)	• No adaptation plans or adaptation guidance exists for the water sector at the National or Provincial levels (including both for water resources and water supply, sanitation and hygiene) • Sporadic and aneodotal data and lessons on adaptation at Provincial level • Lack of downscaled details from national assessments across a wide area	3.1 At least 6 vulnerability assessments and Water Sector Climate Change Adaptation Response Plans at Pilot Site level developed 3.2 At least 6 vulnerability assessments and additional Water Sector Climate Change Adaptation Response Plans at replication sites developed (1 per Province) 3.3 At least 6 Provincial Plans informed by vulnerability assessments and Water Sector Climate Change Adaptation	• Water Vulnerability Framework and Assessments • Water Adaptation Response Plans • Provincial Plans with budget allocations • Pre and post workshops/capacity building training surveys/questionnaires • Project reports and technical outputs • Mid-Term and Terminal Evaluation reports	**Assumptions** • Willingness amongst stakeholders and projects to share climate related information • Pilot Site Communities and Stakeholders remain willing to be involved in the project • Adequate support from all the Provincial Administrations to implement project activities (sometimes jointly) • Climate and natural disasters do not hinder project activities and logistics • National Security situation remains stable and improving **Risks** • Weather impedes travel to some Provinces • Insufficient ownership and collaboration with Pilot Site communities and other beneficiaries • Capacity at Provincial level is unable to adequately perform tasks (lack of service providers) • Provincial Administration are unable to secure budget allocations at the end of the project to improve adaptation responses
			Response Plans undertaken in pilot and replica sites, including training of relevant Provincial and National Staff.		
Outputs to deliver Outcome 1: 1.1. Vulnerability assessments of water supplies (in terms of quantity and quality) to climate change in targeted critical areas refined or formulated 1.2. WS-CCAR plans prepared in the context of IWRM and in line with and integrated into existing local and national policy and development planning processes 1.3. Government budgets allocated to support implementation of key components of WS-CCAR plans					
Outcome 2 Increased reliability and improved quality of water supply in targeted areas	4. Number of sites adopting sustainable water resources management practices that enable continuous availability of a sufficient quantity of safe drinking water, given existing and projected climate change (aligned with new AMAT Indicators 1, 2 and 4)	• Rural sanitation coverage is at best only 18% of the population. Composting toilets are not well understood, and sanitation is not considered a viable option for rural communities • **Tuwo:** 100% of community have no water >5 times per annum. • **Gizo:** reticulated system operates at 70% supply, with a further 70% leakage rate. • **Manaaoba:** 90% of community has no RW supply >5 times per annum. • **Taro:** 73% of community have no access to a toilet	4.1 Six sites with increased water storage provides a diversified approach to capturing and storing freshwater safely through island appropriate technologies (100% of communities have regular annual supply) 4.2 At least one pilot site where strategic freshwater reserves are rehabilitated and protected 4.3 At least four pilot sites with appropriate sanitation technologies (e.g., composting toilets) trialled, to protect groundwater and other sources of water supply, supported through appropriate sanitation mobilisation approaches 4.4 More than 3 sites with key groundwater recharge areas, identified, cleaned and/or protected	• Technical pilot site reports: rainwater harvesting surveys, sanitation surveys, feasibility studies • Assessment of whether and how watershed, including groundwater, are better managed and protected including water quality testing.	**Assumptions** • Willingness amongst stakeholders and projects to share climate related information • Pilot Site Communities and Stakeholders remain willing to be involved in the project • Adequate support from all the Provincial Administrations to implement project activities (sometimes jointly) • Climate and natural disasters do not hinder project activities and logistics • National Security situation remains stable and improving **Risks**

		and no alternative safe water supply than existing RW tank system covering only 70% of community (empty >5 times per annum.) • **Santa Catalina:** 94% of community have inadequate roofing to capture water, with 79% of tanks empty > 5 times per annum. • **Tiggoa:** 55% of the community have no water supply >5 times per annum.	4.5 Comprehensive diversified and integrated water supply systems established in at least six sites, through at least 20 adaptation response projects (Outcome 3)	• Technical pilot site reports: rainwater harvesting surveys, sanitation surveys, feasibility studies • Guidelines and appropriate Ordinances for sustainable operation and maintenance of water supply systems and sustainable use of water sources, especially groundwater • Mid-Term and Terminal Evaluation reports	• Weather impedes travel to some Provinces • Insufficient ownership and collaboration with Pilot Site communities and other beneficiaries • Capacity at Provincial level is unable to adequately perform tasks (lack of service providers) • Provincial Administration are unable to secure budget allocations at the end of the project to improve adaptation responses • Inappropriate use of additional sanitation facilities intensifies point source pollution of fresh and marine waters
	5 Number of sites with active Community Based Early Warning Systems in place. (aligned with new AMAT Indicator & and 8)	• Limited coverage of Community Based Early Warning Systems in place in the six pilot sites	5.1 At least 6 sites with Community based Early Warning 'Systems' (CBEWS) in place	• CBEWS communication products and dissemination platforms • Project reports and technical outputs	
Outputs to deliver Outcome 2: 2.1. Community-level WS-CCA soft and concrete measures implemented to improve sanitation and water supply in times of scarcity, that may include, but not limited to: diversification of water sources; protection and restoration of ecosystems that protect critical water resources; improvements in water-use efficiency and overall demand-side management; use of innovative instruments; building on traditional knowledge; protection of freshwater lens through better sanitation practices in small islands (e.g., composting toilets) (in about 6 sites) 2.2. Community-based Climate Early Warning and Disaster Preparedness Information System tailored for water resources management developed and implemented in targeted areas					
Outcome 3 Investments in cost-effective and adaptive water management interventions and technology transfer	6 Number of projects implemented for cost-effective and adaptive water resource management interventions/technologies, based on community driven Water and Adaptation Response Projects with co-financer interventions (aligned with new AMAT Indicators 2 and 4)	• No current direct access to funding for community projects focusing on adaptation and water risks • Development partner and national interventions focused on rural WASH provision do not include adaptation response in project delivery-investments or in climate proofing projects • Only 1 publicly owned potable water filter/desalination unit exists for the entire country	6.1 At least 20 community driven, designed, developed and implemented Water and Adaptation Response Projects (aligned with co-financer interventions) 6.2 Appropriate water supply equipment successfully procured and delivered to pilot sites and key disaster stakeholders such as NDMO for enhanced preparation and response to water scarcity	• Project reports and technical outputs • Water supply equipment procured and piloted in the pilot sites with assessment and monitoring reports • Mid-Term and Terminal Evaluation reports	**Assumptions** • Willingness amongst stakeholders and projects to share climate related information • Communities and Stakeholders remain willing to be involved in the project • Adequate support from all the Provincial Administrations to implement project activities (sometimes jointly) • Climate and natural disasters do not hinder project activities and logistics
					• National Security situation remains stable and improving • Volunteers are available • Communications specialists and journalists are interested in working on the project **Risks** • Weather impedes travel to some Provinces • Insufficient ownership and collaboration with communities and other beneficiaries • Capacity at Provincial level is unable to adequately perform tasks (lack of service providers) • Provincial Administration are unable to secure budget allocations at the end of the project to improve adaptation responses • Inappropriate use of additional sanitation facilities intensifies point source pollution of fresh and marine waters
Outputs to deliver Outcome 3: 3.1. Strategic investments in water infrastructure in target areas, including but not limited to: new household and communal water storage systems and infrastructure; provision of up to 4 portable water filtration and/or desalination systems for sharing across communities in times of extreme water scarcity. 3.2. Compilation of best practices on applicable technologies for dissemination and replication by project partners with support from the project					
Outcome 4 Improved governance and knowledge management for Climate Change Adaptation in the water sector at the local and national levels	7 Number of fora held where key stakeholders generate and exchange knowledge generation, and develop policies that facilitate climate change mainstreaming in the water sector (aligned with new AMAT Indicators 5)	• No national forum exists for sharing, discussing, and learning from adaptation and water management programmes	7.1 A total of 3 National Water and Adaptation Forums held 7.2 One Sanitation and Adaptation Partnership with IWRM participating countries in place	• National Water and Adaptation Forum Report and Outputs • Mission and meeting minutes' reports from partnership visits and meetings	**Assumptions** • Willingness amongst stakeholders and projects to share climate related information and to support the National Water and Adaptation Forum and Sanitation Campaign • Willingness of IWRM participating countries to join the Partnership • Adequate support from all the Provincial Administrations to

	8. Number of awareness and knowledge materials on climate change risks and vulnerability of water sector, and appropriate adaptation and response measures produced through the SIWSAP project with national partners providing cross-sector adaptation relevant information (aligned with new AMAT Indicators 5)	• No specific guidelines exist for water resources, supply, and sanitation relative to climate change impacts and how to plan for these • Until recently, very little national advocacy for sanitation or understanding of climate change impacts • Existing hydrological monitoring systems is not adequate for existing climate variability, or for predicted (and often very localized) climate changes	8.1 One academic/scientific and/or policy publication on the climate change impacts on the water resources of the Solomon Islands 8.2 At least six site specific guidelines and one national guideline produced for climate resilient water supply and sanitation development and management in vulnerable areas of the Solomon Islands 8.3 One National Sanitation Campaign with partners designed and implemented to reach more than 20% of national population. 8.4 Six Peer-to-Peer Learning Network established across Pilot and Replication Sites (Outcome 2) 8.5 One National Diploma on Water and Adaptation with Solomon Islands National University in place 8.6 4 sites with hydrological monitoring equipment installed to improve and expand current national hydrological monitoring network 8.7 At least two creative and/or audio-visual products are produced utilizing participatory communications approaches to communicate, train, influence and provide learning from the project (participatory video, video diaries, theatre, music, etc)	• Scientific and policy reports and publication • Assessment of guidelines on climate resilient water supply and sanitation development • Event reports with number of attendees • Water committee meeting minutes • Survey of teachers/students on quality of National Diploma curriculum • Data from new hydrological monitoring sites • Survey/ dissemination records of communication outputs • Mid-Term and Terminal Evaluation reports	implement project activities (sometimes jointly) • National University has capacity and willingness to actively support the development of a Diploma • Climate and natural disasters do not hinder project activities and logistics • National Security situation remains stable and improving **Risks** • Weather impedes travel to some Provinces • Insufficient ownership and collaboration with Pilot Site communities and other beneficiaries • Capacity at Provincial level is unable to adequately perform tasks (lack of service providers) • Provincial Administration are unable to secure budget allocations at the end of the project to improve adaptation responses
Outputs to deliver Outcome 4: 4.1. Overarching policy and legislation for the water sector that integrates CCA components in IWRM plans drafted and advocated, including guidelines for climate resilient water supply development in vulnerable areas 4.2. Institutional and community capacities strengthened toward water-sector CCA formulation, implementation and monitoring at the national and local levels 4.3. Multi-media knowledge products on CC, CCA, IWRM, lessons learned and best practices developed and disseminated extensively to communities, schools and the general population and through ALM					

2.6 Project implementation & management arrangements

1. The project implementation and management arrangements as envisioned in the ProDoc are presented graphically in Figure 1 and described below, although these were subject to some fluctuation throughout the Project duration, as assessed further in section 3.1.7 of this report.

2.6.1 Project implementation modality

1. The GEF Implementing Agency was UNDP and the Project was implemented under a National Implementation Modality (NIM). Under the NIM the National Executing Agency was the Ministry of Mines, Energy and Rural Electrification (MMERE), and specifically the Water Resources Division (WRD).

2. However, at the request of MMERE and under a Letter of Agreement (LoA) between the Solomon Islands Government (SIG) and UNDP, the day-to-day responsibilities for project execution were assumed by UNDP, who employed all Project Management Unit (PMU) staff and consultants directly, and managed all procurement and project management processes according to UNDP policies and procedures. This made UNDP both the implementing and executing agency. Although employed by UNDP, the PMU was housed within MMERE-WRD, to help ensure close coordination and cooperation with the lead national agency.

3. The Director of MMERE-WRD was designated as the overall **Project Director**, with responsibility to provide project oversight from SIG's perspective and to ensure that institutional support from MMERE was effectively delivered.

4. Other key SIG Ministries identified in the ProDoc as Implementing Entities / Responsible Parties were as

follows, although their roles and responsibilities were not articulated in the ProDoc:

a) Ministry of Environment, Climate Change, Disaster Management and Meteorology (MECDM).

b) Ministry of Health and Medical Services, Environmental Health Division (MHMS-EHD).

c) Ministry of Development Planning and Aid Coordination (MDPAC).

2.6.2 Project Board, Advisory Group & Community Committees

1. The Project implementation & management arrangements included three levels of oversight, coordination and implementation, as follows:

a) **Project Board:** The Project Board consisted of MMERE as the Lead National Agency and UNDP as both the Implementing and Executing Agency plus MECDM, MHMS-EHD and MDPAC. These permanent members were to be assisted by representatives from the National Climate Change Working Group (CCWG) and the National Inter-sectoral Water Coordination Committee (NIWCC) as invited members.

The Project Board was responsible for making management decisions and strategic guidance to the Project, and for supporting the Project Director and Project Manager in decision making where required. The Project Board approved the annual work plans and budgets, and set tolerances for the work.

In order to ensure UNDP's ultimate accountability for the project results, Project Board decisions were required to be made in accordance with standards that ensure management for development results, best value for money, fairness, integrity, transparency, and effective international competition. The Project Board was chaired by the Permanent Secretary of the MMERE.

b) **Project Advisory Group**: A Project Advisory Group (PAG) was outlined in the ProDoc, as having the function to provide policy and technical guidance to the Project Board. The PAG was envisaged to consist of key relevant national stakeholders including the National Disaster Management Office (NDMO), the MDPAC, and relevant donors who provide cofinancing and support to the Project, together with provincial government representative(s) as project partners and beneficiaries.

Furthermore, the PAG was to be joined by the CCWG and the NIWCC if CCWG and NIWCC are not already, through invitation, members of the Project Board. The Water Supply, Sanitation and Hygiene (WASH) Stakeholder Group was an invited member of the PAG.

At the time of the MTR (May 2017) the PAG had not been formally operationalized and the MTR recommended that this should be addressed as a matter of priority. However, instead for efficiency the Project worked through the existing SIG WASH Working Group.

c) **Project Site Community Water Committees:** Community Water Committees were established at the 12 pilot and replica sites, to build upon existing provincial and/or community water sector management institutions, and to help guide site activities and a strong sense of community involvement and ownership. *The TE is of the view that the community committees were a*

major factor in the success of SIWSAP at many sites, and the community engagement aspects of SIWSAP provide a best-practice model for other similar projects.

2.6.3 Project Management Unit

2. As outlined above the Project Management Unit (PMU) was established within the offices of MMERE-WRD in Honiara, although they were employed directly by UNDP and subject to UNDP recruitment, procurement and project management processes, policies and procedures. The PMU provided technical, administrative and management functions for the implementation of the Project on a day-to-day basis. In effect, the PMU was the "engine room" for ensuring the successful "on-the-ground" implementation of the Project.

3. Staffing of the PMU included the three core position of Project Manager (PM), Chief Technical Adviser (CTA) and Procurement Officer (PO), plus a range of technical and support staff. Of particular note was an unusually high level of fluidity in both the staff structure of the PMU and in staff turnover – and this is assessed further in section 3.3.3 of this report.

4. The Project also employed six Provincial Project Officers (PPOs) for each of the sixe pilot sites.

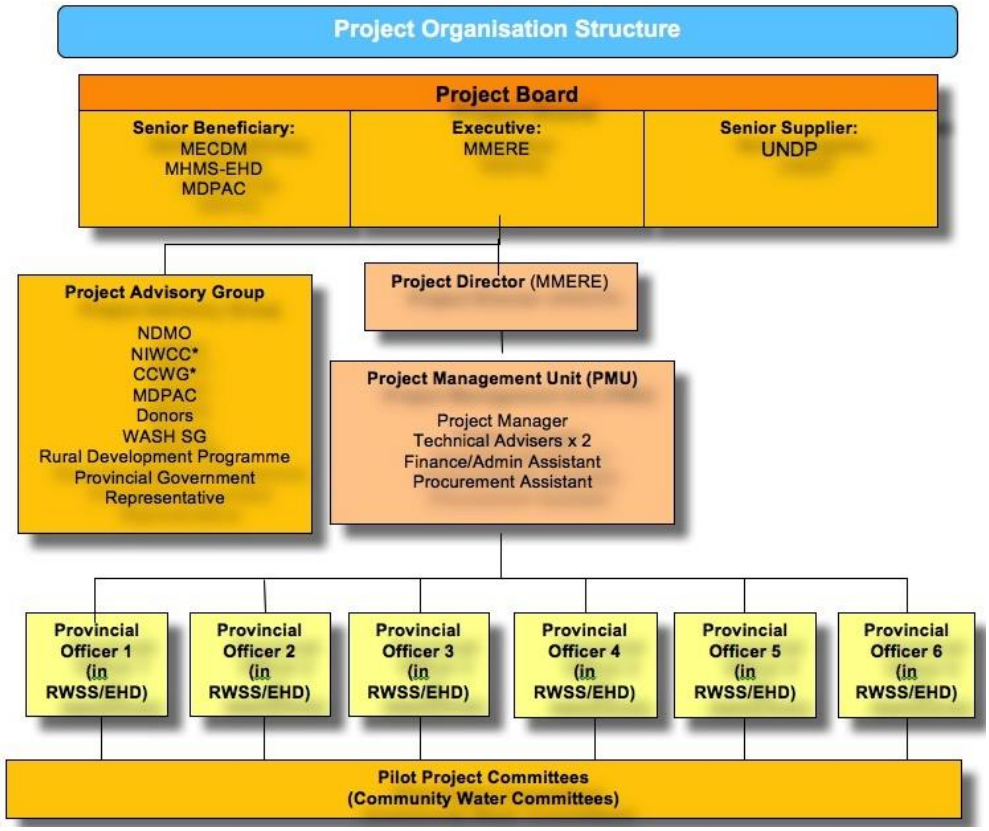


FIGURE 1: *SIWSAP project implementation and management arrangements as envisioned in the ProDoc. These were subject to some fluctuation throughout the Project duration, as assessed further in section 3.2.4 of this report.*

2.7 Main stakeholders

1. Significant attention has been paid to identifying key Project stakeholders, both during the initial project design as outlined in the ProDoc, and through continuous updating by the PMU during Project implementation. Table 3 lists key project stakeholders. In addition. Annex 2 to this report list key stakeholders that were interviewed during the TE mission.

TABLE 3: *Key project stakeholders*

Stakeholder	**Involvement in SIWSAP**
Water Resources Division of the Ministry of Mines, Energy & Rural Electrification	Lead National Agency for the SIWSAP. Host the UNDP-engaged PMU. In-kind and cofinance support to the project through budget. Coordinate policy and legislation development; hydrological monitoring and water resource assessments; water quality monitoring. Coordinate access and partnership arrangements with customary landowners. Take lead in seeking public-private partnerships. Support to community engagement and development of project best practice materials.
Rural Water Supply and Sanitation Programme of the Ministry of Health and Medical Services	Secondary SIWSAP Executing Agency. Coordinate and implement rural water supply projects. In-kind support to the project working with PMU on pilot site and investment designs and interventions. Development of standards and guidelines for RWSS projects. Implementation agency for Outcomes 2 and 3, working closely with MMERE-WRD and Provincial Authorities. Support to community engagement and development of project best practice materials.
Climate Change Division – Ministry of Environment, Climate Change, Disaster Management and Meteorology	Assist with mainstreaming of climate change activities. Further Development of climate change policy through review and learning. Provide guidelines and training in V&A assessments to develop WS-CCAR framework and plans. Support the National Water and Adaptation Forum Provide vulnerability information and climate relevant information to the project. Guide the implementation of Environment Impact Assessment for water projects (where required by law). Support to community engagement and development of project best practice materials.
National Disaster Management Office	Assist with mainstreaming of DRR and provide training. Assist provincial governments with disaster preparedness and coordination of village disaster committees. Assist PMU with pilot site interventions. Support the National Water and Adaptation Forum. Support key community activities under Outcome 2 related to community based early warning. Support to community engagement and development of project best practice materials.
Ministry of Lands and Housing	Provide guidance on land owner identification, consultations and partnership building, community consultations.
Ministry of Forests and Research	Support with catchment management activities where necessary.
Ministry of Infrastructure Development	Design and construction of water supply infrastructure, at the Provincial level.
Provincial Governments	Mainstreaming of climate change adaptation. Identification of project sites. Monitoring of project activities, in-kind support to project delivery. Review of pilot site designs and interventions, and sign off with the SIWSAP Provincial Officer and SIWSAP PMU. Management and implementation of provincial urban water supply system in partnership with Solomon Islands Water Authority. Support to community engagement and development of project best practice materials.
Solomon Islands Water Authority	Provide guidance on supply and demand management approaches – especially for town sites.
School of Industrial Development of the Solomon Islands College of Higher Education	Development of training materials and provide training for community based water technicians. Assist in training and learning and formal training during implementation.
Community organizations	Implement WS-CCA projects as major partner in the project. Establish governance arrangements for IWRM. Contribute labor and materials, and ideas, and energy, and enthusiasm for project activities.

Stakeholder	**Involvement in SIWSAP**
Solomon Islands Meteorological Services	Develop and assist communities and provincial governments with early warning systems and information for community based disaster preparedness. In-kind provision of information and data to the project.
Ministry of Finance and Treasury	Mainstreaming of Climate Change into national and provincial budgets, through the Province to National process of learning from project pilots
Ministry of Development Planning and Aid Coordination	Coordinate donor support towards the water sector. Mainstream climate change into development budgets. Coordinate national-level resource mobilization strategies for the water sector. Learning from the project to help guide future
Ministry of Rural Development	Mainstreaming of IWRM and CCA into water supply and protection projects funded under the Constituency Development Fund.
Solomon Islands National University	Support Outcome 4 of the project relating to capacity development support through development of a national diploma.
Solomon Islands Red Cross; World Vision; Adventist Development and Relief Agency; Caritas; other NGOs and church-based organizations working on water and sanitation	Plan and implement community based water supply and sanitation projects using IWRM and CCA approaches. Plan and implement community based early warning work. Invest in-kind support in networks and learning
Private Sector Companies	Design and provision of water supply materials and equipment; public-private partnerships in provision of services and infrastructure. Share experiences with respect to challenges to implements projects and supply chain risks for material and supplies for Provincial Governments and communities.

3. TERMINAL EVALUTION FINDINGS

3.1 Evaluation of Project Design

3.1.1 Project Results Framework

1. As outlined in section 2.5 the ProDoc included a comprehensive and well-developed Project Results Framework (PRF). Our evaluation of the PRF is that it is fundamentally sound and contains the usual components of a properly designed PRF; including both quantitative and qualitative indicators, description of the baseline situation, end-of-project targets, risks and assumptions and means of verification.

2. Some of indicators and targets are found to be unrealistic or unclear, and the to their credit, in part to address this the PMU developed supplementary, scientifically based technical performance criteria including minimum water supply to population ratios, and used these for project planning and monitoring and evaluation (M&E).

3. The Mid Term Review (MTR) also recommended some refinements to the PRF, especially indicators and targets, and the PMU took these on and effectively adapted the PRF.

3.1.2 Incorporation of lessons from other relevant projects

1. Compared with many other similar projects it appears that for this project, significant effort was made during the project design to incorporate lessons from previous and other relevant projects, which has been a significant positive factor in ensuring that the project design is sensible, logical and practical, and which has assisted greatly in the successful implementation of the Project.

2. The Director of the Water Resources Division of MMERE was heavily involved in the project design and as he had been and was still involved in many other water sector projects in the Solomon Islands, was able to bring these experiences to influence the design of SIWSAP.

3. Learning lessons from other projects, the design of SIWSAP departed from the all-to-common practice of projects working in isolation and rather embraced a more collaborative model, seeking to cooperate, coordinate and even integrate with the efforts of other related initiatives. Such an approach allows synergies, efficiencies, leveraging and multiplier effects to be achieved.

3.1.3 Stakeholder participation

1. Effective stakeholder participation was one of the significant successes of SIWSAP, and was effected both through the inter-ministerial membership of the Project Board and the cross-sectoral membership of the existing SIG WASH Working Group (which for efficiency the Project worked through instead of establishing a PAG as envisioned in the ProDoc), as well as through the Community Water Committees. The PMs and PMU staff also appear to have made significant efforts to foster stakeholder participation through professional and personal contacts and efforts in the water and development sectors.

2. The National Feedback Session held in 2016 and the two National Water Forums held in 2017 and 2018 also played a very productive role in promoting effective stakeholder participation. These forums have helped to raise national awareness about water sector adaptation to climate change and stimulate better coordination and cooperation on water security and resilience issues (Figure 2).

3. However, while stakeholder participation was effective at both the national and community level, there appears to have been a gap at the level in between - the provincial level. While some provinces such as Choiseul were very engaged as stakeholders, several of the other provinces showed limited engagement.

4. For some Provinces, beneficiary communities reported poor engagement, communication and support from both the UNDP-contracted Provincial Project Officers (PPOs) and from the Provincial Governments (PGs) themselves.

FIGURE 2*: A significant output of SIWSAP has been the National Feedback Session held in 2016 and the two National Water Forums held in 2017 and 2018. These forums have helped to raise national awareness about water sector adaptation to climate change and stimulate better coordination and cooperation on water security and resilience issues (source: SIWSAP)*

3.1.4 Replication approach

1. Replication of model practices and achievements demonstrated at the initial six Pilot Sites was a core part of the Project design – however the design intention was that the Pilot Sites would catalyze much broader provincial-level replication, including development, adoption and implementation of Provincial water sector climate change adaptation response plans. Unfortunately, for various reasons this was not achieved and the replication effort was reduced to implementing some restricted actions at six Replica Sites from mid 2018 onwards. The six Replica Sites are all in the same Provinces as the Pilot Sites, and in many cases in immediately neighbouring communities to the Pilot Sites.

2. This meant that two major Provinces, Guadacanal and Isabel, received no investments at all from SIWSAP, and even within the pilot Provinces, the geographical spread and representativeness of replication was very narrow. This raises questions about the rigour and transparency of the Replica Site selection process.

3. The Project did develop Replica Site Evaluation Criteria (Figure 3), however it is not clear how, of the circa 5,000 villages in the Solomon Islands, six were shortlisted for this screening.

4. Due to the very late start of Replica Site activities (from mid 2018), and the limited remaining budget from that time, Project actions at the six Replica Sites were basically restricted to developing the Integrated Vulnerability Assessments (IVS) and installing some rainwater tanks, plus a desalination plant at Fiu, a secondary Replica Site in Malaita Province (the desal unit was put at Fiu because the groundwater

recharge rate at Kwai is not adequate for the Desal unit). Greater returns on investment might have been achieved if these funds had been used instead to develop Provincial water sector climate change adaptation response plans, including developing resource mobilization arrangements to ensure their implementation post-SIWSAP.

5. Overall, while the replication approach envisaged in the ProDoc was well intentioned, we assess that the restricted, belated and site-focused replication approach that was actually implemented is a non-optimum investment of GEF funds.

REPLICA SITES EVALUATION MATRIX

Criteria	Weight	Rating	Comments
1. Is identified in government policy and plans as a priority for action and support (i.e NAPA and integrating water plans, RWASH Policy, Watsan Policy, etc).	10%		
2. Faces a significance level of climate change threat and vulnerability (e.g constant flooding, coastal erosion, high temperature, regular cyclones, etc)	12%		
3.Includes UNDP/UNICEF, other partners, government pipeline projects (e.g RWASH projects which will need to be climate proofed)	10%		
4. Includes a key rural village (e.g a satellite village and atoll settlement/ development node with a concentration of water resource needs and beneficiaries.	10%		
5. Include water infrastructure / resources of strategic importance to the province/ village.	8%		
6. Has potential as an accessible and representative demonstration project	5%		
7. Has been subjected to past studies and reasonable depth of information to feed into the climate change impacts and vulnerability assessment	5%		
8. Free of any form of land disputes (present & future).	10%		

FIGURE 3*: The Replica Site Evaluation Matrix (source: SIWSAP)*

3.1.5 UNDP comparative advantage

1. The comparative advantage of UNDP as the GEF Implementing Agency for this Project is based on the long-standing physical presence of UNDP in the Pacific including a presence in the Solomon Islands, with a long history of UN support to SIG on sustainable development issues. The UNDP has well established and effective working relationships with relevant Central and Provincial Government agencies, as well as international experience with capacity development programs, and an ability to access international expertise on water resources and sanitation issues. The UNDP local presence is also effectively supported UNDP Regional Technical Adviser (RTA) for climate change adaptation located in Sydney (but reporting to the UNDP Regional Hub in Bangkok), adding to the agency's comparative advantage.

3.1.6 Linkages between project & other interventions within the sector

1. As outlined above the design of SIWSAP departed from the all-to-common practice of projects working in isolation and rather embraced a more collaborative model, seeking to cooperate, coordinate and even integrate with the efforts of other related initiatives. Such an approach allows synergies, efficiencies, leveraging and multiplier effects to be achieved.

2. Other related interventions in the Solomon Islands water sector that SIWSAP has coordinated with include:

    a) The multi-donor Rural Development Programme (RDP).

    b) The EU-EDF10 and DFAT funded Rural-WASH programme executed through the Ministry of Health & Medical Services.

    c) The World Bank-GEF funded Community Resilience to Climate and Disaster Risk Project (CRISP).

    d) Various NGOs, including Save the Children, who are also delivering water sector activities in the country.

3.1.7 Evaluation of project management arrangements

1. The project management arrangements as envisioned in the ProDoc are described in section 2.6 above. While these are fairly standard for UNDP-GEF projects, including (various different terms are used depending on the project), an Implementing Agency (for GEF purposes), an Executing Agency (for in-country implementation), a Project Board, a Project Advisory group, a Project Management Unit with project staff, and ancillary groups (in this case Community Water Committees). We find a number of problems and deficiencies with the project management arrangements, both in terms of design and in terms of implementation, as follows:

    a) As found by the MTR, while the MECDM, MHMS-EHD and MDPAC are listed as Responsible Parties in the ProDoc, their roles and responsibilities were not well defined.

    b) Despite the infrastructure focus of the Project, including in relation to improving sanitation, the Project design did not include a Civil Engineer as a PMU staff position. It was not until November 2017 (more than 3 years after project start), after much lobbying by the PM, that a Civil Engineer was engaged. Had this position been in place from project start, greater progress might have been made.

c) The structure and staffing of the PMU was highly fluid and changed significantly over time, with no less than seven different structures over four years, and a very high rate of staff turnover, as shown in Figures 4 and Table 4. To be effective during a time constrained four year project, PMU staffing needs to remain as constant as possible.

d) Of particular note, after departure of the initial CTA in July 2015 (after only six months of duty), the project was without a CTA for nearly two years, until a new CTA commenced in June 2017. It is understood that the reason for this critical gap was that SIG was staunchly opposed to engaging a replacement CTA, because it is an international position (UN level P4). These positions consume a significant part of the project budget, which SIG preferred to allocate to in-country activities. However, given the highly technical nature of the Project, including the sanitation components, there is no doubt that lack of a CTA would have been a major factor in lack of Project delivery. The TE considers that it was a strategic error to have left this key position unfilled for so long.

e) The PPOs, who were based remotely in the Provincial capitals and not in the Pilot Sites (except where the two coincide such as Taro and Gizo), were not always effective. For some Provinces, beneficiary communities reported poor engagement, communication and support from the PPOs.

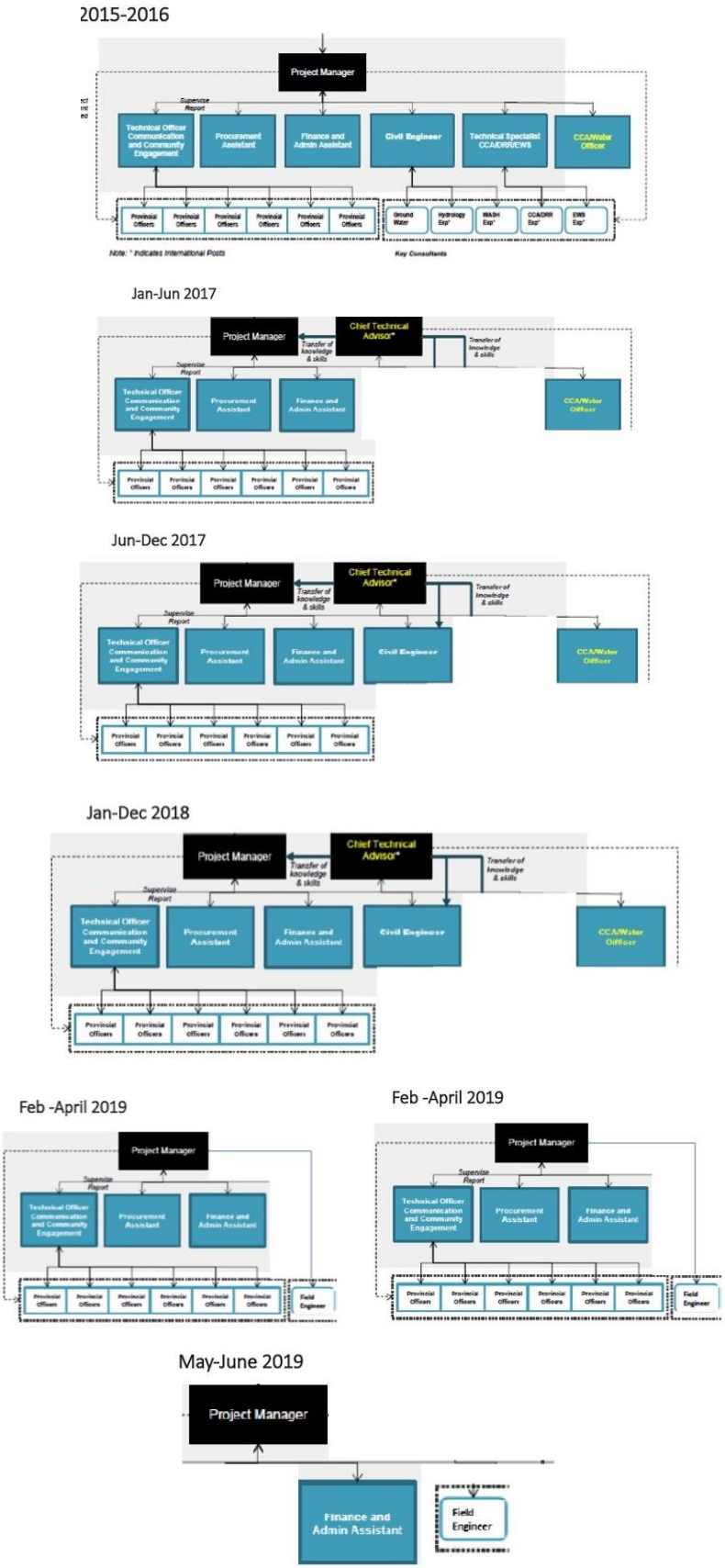
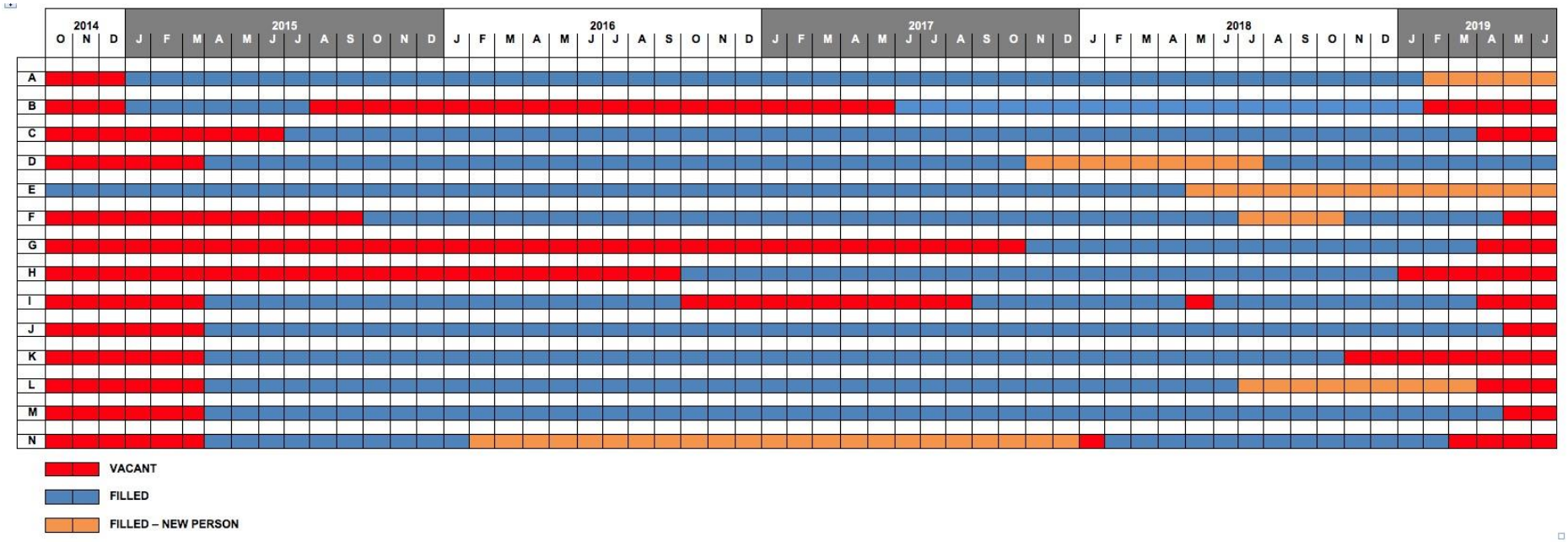


FIGURE 4: *Ongoing changes to the PMU structure and staffing throughout the Project timeline - with no less than seven different structures over four years – which is inefficient.*

TABLE 4: *SIWSAP staff continuity*

NOTE: Official Project start was June 2014 – not shown on this chart due to page space limits.



A	Project Manager
B	Chief Technical Adviser
C	Technical Officer, Communications & Community Engagement
$D	Procurement Assistant
E	Finance & Administrative Assistant
F	Water Sector Adaptation Officer
G	Civil Engineer Specialist
H	Climate Change Adaptation Water Officer
I	Provincial Project Officer (PPO) - Choiseul
J	PPO - RenBel
K	PPO - Western
L	PPO - Makira
M	PPO - Malaita
N	PPO - Temotu

3.2 Evaluation of project Implementation

3.2.1 Adaptive management

1. The PMU and UNDP more generally, as well as the relevant SIG agencies, demonstrated an outstanding capacity for adaptive management in response to changing circumstances and unexpected developments, which is essential for successful project execution. Significant examples of successful adaptive management applied during the project include, *inter alia*:

    a) The Quick Fix program was developed to respond rapidly to real-community needs during the 2015 El Nino drought period.

    b) The Ferafalu land dispute was dealt with effectively – alternative site and solution were found and implemented rapidly.

    c) The PRF was adapted after the MTR.

    d) Both UNDP and SIG rapidly mobilized additional resources to plug the unexpected (and unexplained) budget shortfall towards end of 2018.

    e) For the replica sites, to achieve efficiency and cost-effectiveness the CCVA and WSCCARPs developed for the pilot sites were combined into IVAs.

2. The Mid Term review (MTR) carried out in May 2017 also recommended some refinements and improvements to the Project, which were implemented as shown in Table 5.

TABLE 5: *Project responses to the MTR recommendations*

	MTR Recommendation	Action taken by the Project (text provided by the PMU)
1.	**Define and communicate adaptation benefits generated by the project**. The project needs to differentiate itself from a traditional WASH project, by developing and implementing a focused communication plan. As a first step, the adaptation benefits generated by the project should be clearly defined, communicated internally, and then appropriately packaged accordingly to particular target stakeholder groups and disseminated accordingly. Some examples of relevant adaptation benefits include (these should be further developed and refined): a) An integrated approach strengthens resilience. Most of the project interventions are closely linked; including increased and diversified water supply, improved sanitation, improved waste management, early warning systems and response, etc. b) Broadened dialogue and coordination across sections and between subnational and national administrative levels results in more safeguards in place. c) Increased public access to information also strengthens resilience. d) Reduced risk of potential loss and damage associated with the adverse effects of climate change, through expansion. It would also be advisable to design and deliver a knowledge, attitude, and practices (KAP) survey to support communication and knowledge management objectives.	• Addressed and ongoing: Adaptation benefits of increased resilience realized through SIWSAP's integrated and multi-stakeholder partnership approach really begun to be appreciated in Pilot sites by the end of 2018 in a number of more advanced sites (Santa Catalina, Taro and Tuwo) and were captured in the SIWSAP Impact film (at final draft stage) intended for external audiences and shared at the NWCCF 2018 and also through various media channels, helped greatly by the visibility generated as a result of the Project Board visit to Taro. • Actioned and ongoing: An internal briefing paper was developed and highlighted the integrated approach taken by the project helped PMU staff and POs to better understand how the project is different from a conventional WASH project. The Draft SIWSAP Impact Film developed shows how an integrated approach is more impactful than a standalone approach of focusing on one technology and how the approach generates adaptation benefits. • Actioned and ongoing: The multi- stakeholder partnership approach is consistently championed in any internal and external communication products and the National Water and Climate Change Forum 2018 is an excellent example of fostering increased dialogue and coordination across sectors and between administrative levels of government (National and Provincial) • Actioned and ongoing: SIWSAP website, twitter and YouTube accounts are established with articles, tweets and films regularly shared. • Awareness raising activities have been conducted in target sites with the public, including school children, on the adaptation benefits of desalinated water and the importance of water conservation. • Public events and campaigns to raise awareness on climate change and water issues have been organized by the project throughout the years to coincide with established global days such as World Environment Day and World Water Day. Participated in radio program talk shows organized by CCD • Actioned and ongoing: expansion of rainwater harvesting storage is a key primary intervention of the project and the principle approach is championed throughout internal and external communication products.
2.	**Clarify project organisation and reporting procedures, and improve collaboration with government and non-government partners**. The MECDM, MHMS-EHD, MDPAC and UNDP are listed as Responsible Parties in the project document, but their roles and responsibilities are not well defined. Moreover, synergies with complementary projects and programmes, some of which are hosted by these Responsible Parties, have not materialised as envisaged. a) Define roles and responsibilities of Responsible Parties in one or more letter of agreement. b) Organize a workshop with other projects and programmes, identifying synergies and development specific partnership arrangements. c) Strengthen existing governance structures, including the National Climate Change Working Group (CCWG) and the National Inter-sectoral Water Coordination Committee (NIWCC).	• Addressed and ongoing: Partnerships have been strengthened, especially at national level between the project/WRD, RWASH and Solomon Water on the Gizo water supply project, helped in part by the inclusive NWCCF 2018 platform facilitated by the project, which also enabled first steps to be taken towards strengthening of sectoral coordination mechanisms through proposed establishment of a Thematic/Technical Working Group on Water and Climate Change. WRD and CCD are also collaborating strongly as demonstrated by the joint rollout of the IVA/WSCCARP in Replica sites. • Actioned and ongoing: There is an LoA between MMERE and UNDP and now a signed tripartite MoU for the Gizo water supply project, signed by RWASH/WRD and UNDP. Community engagement workshops to commence Q2, 2019 and Rehabilitation projects to start Q4, 2019. • Actioned and completed: The National Water and Climate Change Forum 2018 was the first occasion where a national platform for government and programmes/projects to exchange knowledge was facilitated by the project. Productive side discussions on

	MTR Recommendation	Action taken by the Project (text provided by the PMU)
		Gizo water supply rehabilitation project were held between WRD/SIWA/RWASH/WPG and SIWSAP, resulting in potential further collaboration and technical/financial support available. RDP also proposed to establish a link between SIWSAP Water Committee's in rural locations and national level fora and formal sector coordination mechanisms such as the proposed Water and Climate Change Thematic/Technical Working Group. • Actioned and ongoing: SIWSAP are a strong member and regular participant at WASH Stakeholder Group meetings and were involved in lobbying for the establishment of the CCWG, which met for first time in 2017 but has not met again since. The NWCCF 2018 provided a platform for discussions on improving sector coordination mechanisms, with the afternoon of the second day allocated for group discussions. The recommendation was to revive the CCWG and establish a sub Thematic/Technical Working Group (TWG) on Water and Climate Change. The TWG would be accountable to both CCWG and NIWCC with a TOR covering relevant Policy themes from both the Climate Change Policy and the new WATSAN Policy.
3.	**Articulate a justification for a time extension.** Based upon progress towards results achieved by midterm, it is highly unlikely that the envisaged end of project results will be realised within the allocated implementation timeframe. In the opinion of the MTR team, a 12-month no-cost extension would be required to fulfil the activities slated for the second half of the project, including implementing the recommendations set forth in this MTR report. Justification for a possible time extension should be articulated accordingly. Generating adaptation benefits takes time, and the original 4-year timeframe was insufficient to adequately build up the requisite enabling conditions. Also, there is a high risk of operational failure of certain systems without sufficient monitoring and evaluation oversight in the early phases of implementation.	• Addressed fully: Extension has been granted for 12 months until June 2019. • Actioned and completed: Extension approved by the Project Board on 23/08/17 and granted on 18/01/18.
4.	**Recruit technical advisory support.** The lack of full-time technical advisory support has adversely affected project delivery and coherence. Some key areas requiring technical support include: a) Overseeing integrated water resource management planning; b) Reviewing engineering feasibility and cost-benefit analyses; c) Enhancing CCA response plans, developing provincial strategies, and integrating with provincial development plans; d) Supporting start-up operation of desalination; and e) Supporting construction management of field interventions.	• Addressed and ongoing: Chief Technical Advisor (CTA) and Civil Engineering Specialist (CES) hired and onboard since 21/06/17 and 19/11/17 respectively, and due to phase out support on 31/01/18 and 15/03/18 respectively. Technical interventions are implemented with quality and there is improved integration and coherence of interventions (hard and soft) for increased resilience. • Actioned and ongoing: Technical advisory support staff identified and promoted the collaboration between CCD/WRD on the scaling up and rollout of the Integrated Vulnerability Assessment (IVA) approach/tool to replica sites, which considers IWRM, primarily through identification and prioritizing of vulnerabilities and adaptation responses in the "Watershed Health" sector specific assessment. See also Recommendation 6 for more comprehensive details. • Actioned and ongoing: Largely complete for both pilot sites and replica sites with projects either implemented, in the pipeline or being developed into procurement ready packages for handing over to Provincial and/or National Government. • Actioned and ongoing: Successful efforts were made to engage Provincial Government in the replica site IVA/WSCCARP assessments and it was made clear that given the limited time and resources available, the project would not be able to implement many priority adaptation response projects and it was suggested that

	MTR Recommendation	Action taken by the Project (text provided by the PMU)
		Provincial Governments instead support those projects, following technical assistance from the project in terms of undertaking site feasibility assessments and developing procurement/tender ready packages, wherever possible, that can be easily implemented by Provincial Government. Examples include: o -Taro dumpsite rehabilitation project. o -Vonunu pipeline rehabilitation. o -Kirakira and Lata resistivity and borehole assessments. • Actioned and ongoing: Largely complete, with desalination and ultrafiltration systems all installed and successfully operating for over one year. • Actioned and ongoing: Largely complete for 12 projects in pilot sites with mostly final completion certificates to be awarded follow satisfactory completion of defect liability period. Construction management and technical oversight is planned for replica sites with a fully capacitated engineering unit.
5.	**Develop an adaptive management approach for engaging provincial level adaptation planning processes**. The adaptation plans produced by the project are site specific, and provincial level water sector vulnerabilities have not been assessed and there is limited integration with provincial medium term development planning. a) Work with provincial planning personnel on developing a water sector climate change adaptation strategy. b) Enhance site-level adaptation priorities into procurement ready activities that could be taken up in the medium term development plans. c) Issue a Request for Expression of Interest for replication sites in the provinces. d) Work with the provincial authorities in water sector adaptation planning for the replication sites. e) Leverage support from the UNDP project "Supporting peaceful and inclusive transition in Solomon Islands", financed by the Peace Building Fund (PBF).	• Addressed and ongoing: Project promoted good ownership of IVA/WSCCARP site assessment process by Provincial Government officials and technical staff, but no scale up as yet to Provincial level planning and budgeting processes, although there is hope that some Provincial Governments will implement some of the procurement/tender ready projects planned to be shared by the project soon. • Not actioned: although Provincial technical officers have supported and been engaged with the WSCCARP approach in Replica sites, the project is yet to engage Provincial planning personnel to scale up the approach. • Actioned and ongoing: There are a number of adaptation priorities identified through the WSCCARPs that will not be financially supported by the project and instead the project is finalizing procurement/tender ready packages with feasibility assessments, full designs, BoQs and costings for sharing with Provincial and National level Government. Examples include: o -Taro dumpsite rehabilitation project. o -Vonunu pipeline rehabilitation. o - Poroporo new pipeline. o - Lata Borehole and reticulation. • Actioned and completed: EOI was launched for five Provinces (excluding Choiseul which was already identified during the PPG phase) and closed on 11th May 2018. A review panel comprised of key stakeholders (WRD/CCD/EHD/RSD/SIWSAP) met to review the applications on 1st June 2018 and the final decision for the successful six replica sites was fully approved by the panel on 6th June 2018. • Actioned and completed: Provincial technical officers were involved in the IVA/WSCCARP site assessments for replica sites. RWASH Officers acted as facilitators in Malaita (Kwai), RenBel (Lavagu) and joined assessments in Poroporo (Choiseul) and Vonunu (Western). Government officials from Premier to technical levels were involved in WSCCARP workshops in both Lata and Kirakira. • Actioned and ongoing: Project is in touch with PBF and will explore opportunities if they arise.
6.	**Incorporate integrated water resource management (IWRM) principles into adaptation plans**. The water sector adaptation response plans should be strengthened by incorporating IWRM principles; the project sites could be entry points for adopting an IWRM approach	• Addressed: An integrated approach considering interlinkages between multiple sectors, including for watershed health, was taken for the replica site V&A assessments through the Integrated Vulnerability Assessment (IVA), an approach/tool that considers IWRM and how water relates to various sectors such as

	MTR Recommendation	Action taken by the Project (text provided by the PMU)
	on a provincial scale.	community health and food security. Through promoting the collaboration between WRD/CCD the project has supported scaling up of the IVA approach/tool to new Provinces, so the replica sites may prove to be an entry point for Province wide scale up of the integrated approach/tool, including IWRM considerations. • Actioned and completed: The project primarily focusses on water for human consumption, however, the project has explored more IWRM relevant approaches through the use of the Integrated Vulnerability Assessment (IVA) tool, which looks at vulnerabilities more holistically considering inter linkages across nine sectors, including water security, watershed health, and how water contributes to vulnerabilities in other sectors such as community health and food security. • Appropriate adaptation responses are initially identified for priority issues across all nine sectors, including any that may be IWRM related, and the top five water related priority issues are taken forward to the WSCCARP which may or may not include IWRM related water priorities. • In all but one case, no watershed (IWRM) issues were identified in the top five priorities, so are not being addressed, but the watershed (IWRM) issues/vulnerabilities are captured in the consolidated IVA/WSCCARP report. • Through promoting the collaboration between WRD/CCD the project has supported scaling up of the IVA approach/tool to new Provinces, so the replica sites may prove to be an entry point for Province wide scale up of the integrated approach/tool, including IWRM considerations.
7.	**Implement a thematic based procurement strategy, starting with interventions that are most prepared**. Design uncertainties preclude a consolidated procurement strategy for the field interventions planned in the second half of the project. For example, the source of the piped system in Gizo has not yet been agreed upon, and potential partnership arrangements have not been fully assessed. Moreover, plans for groundwater development should be based upon results of hydrogeologic assessments and field trials – which have not yet been completed. A thematic based procurement strategy would allow progress on interventions that have a higher level of preparedness, such as rainwater harvesting, and provide sufficient time to sort out design uncertainties, negotiate partnership arrangements, and carry out water resource assessments.	• Addressed fully: for Pilot sites, with procurement proceeding first for rainwater harvesting, hand dug wells and small scale reticulated piped systems and later for more complex projects such as the Gizo water supply rehabilitation project, following successful negotiations for technical and financial support through partnership arrangements between WRD/RWASH/Solomon Water/SIWSAP. • Actioned and completed: For Pilot sites, an Invitation to Bid (ITB) was launched and concluded in Q4 2017 for only those more straightforward lower risk projects that the project were ready and capacitated to implement with limited external support required (i.e. rainwater harvesting, hand dug wells and small-scale reticulated pipeline). • The more complex Gizo water supply rehabilitation project was launched in a separate subsequent tender in Q4 2018, following extensive assessments, consultations and partnership discussions throughout 2017, primarily with RWASH. • The result is that the project is proceeding, following the signing of a tripartite MoU between WRD/RWASH/SIWSAP that is allowing the work on the South Coast rural communities to proceed, thus, clearing the way for the work on the main pipeline to proceed.
8.	**Advocate implementation of improved sanitation demonstrations at relevant project sites.** There has been limited progress made with respect to improved sanitation activities. This seems partly due to a government policy that limits subsidies for rural sanitation interventions was issued after project approval. In the opinion of the MTR team, implementing an unsubsidized community led total sanitation (CLTS) process in the rural	• Addressed partially and off-track: An engineering feasibility assessment and designs, BoQ and cost estimate have been drawn up for a public toilet in Taro, however, at this late stage of the project it seems highly unlikely that the community sanitation aspects of the project will be achieved as there is insufficient time to effect behavioral change and communities have voiced their reluctance to trialing of environmentally appropriate dry sanitation technologies, citing that the technologies are

	MTR Recommendation	Action taken by the Project (text provided by the PMU)
	communities within the available time would be difficult to achieve. Certain demonstrations are required for building trust and confidence with the local communities. Funding improved sanitation technologies deemed favorable with respect to water sector climate change adaptation criteria, is consistent with the variance to the no-subsidy policy of the government.	culturally unacceptable. • Actioned and off-track: An engineering feasibility assessment and designs, BoQ and cost estimate have been drawn up for a public toilet in Taro. Unsuccessful efforts have been made to advocate for implementation of improved environmentally appropriate dry sanitation in rural sites that uses less water and protects groundwater, and the project stands ready to implement composting and other dry toilet trial installations in two rural sites, using RWASH approved designs/BoQs. • However, the communities are reluctant as they see the technology as culturally unacceptable. It seems at this late stage of the project, with very limited time available, that the sanitation aspects of the project will not be achieved as there is insufficient time to effect behavioral change.
9.	**Arrange trial installation and operation of one or two of the desalination units**. The project is unprepared to install and operate the desalination equipment that has been procured. These are the first such systems to operate in the country, and there is understandably keen interest among several stakeholders. At the site level, water sources are not yet fully agreed upon for the desalination equipment; a laboratory partner is not yet in place for supporting assessment of system performance; designs are not yet complete (e.g., discharge of backwash); and operation and maintenance plans have not yet been developed. The installation and operation of the water treatment equipment should be fully worked out for one or maximum two sites: a) Decide upon the water source(s) with the support of the planned assessments of hydrogeologic conditions, and characterize baseline conditions; b) Ensure appropriate social and environmental safeguards are in place, e.g., securing property access rights, management of backwash water, etc.; c) Secure a laboratory partnership; d) Develop an operation, maintenance, and monitoring plan; e) Develop a contingency plan, including for addressing lower than expected water demand; f) Train local, provincial, and national operational staff; g) Run the system(s) for 3 months; h) Monitor and evaluate performance; i) Evaluate operation cost and demands (e.g., time); j) Evaluate communication needs and methods; and k) Consolidate lessons learned, and complete plans and installations of the other sites.	• Addressed and ongoing: Successful installations in five sites, with systems fully operational. Adaptation benefits resulting from use of the systems are evident, however efforts to demonstrate the medium-term feasibility to operate, maintain, finance and sustain these investments and an assessment of their cost effectiveness is less proven, with work ongoing to monitor and evaluate performance and share lessons learnt with interested stakeholders on the suitability of the systems for scale up. • Actioned and completed: Water sources selected in five pilot sites during engineering feasibility assessments including establishing physical chemical water quality baseline. Groundwater pump tests on the shallow wells were subsequently undertaken by WRD/SIWSAP. • Actioned and ongoing: MoUs were signed with landowners for installations in community sites (Santa Catalina and Tuwo). Backwash water is appropriately disposed to areas away from the raw water sources and in some cases (Taro) is used to irrigate salt tolerant legumes. • Actioned and ongoing: a basic water quality monitoring plan is in place for basic physical chemical parameters for which the site operatives have been provided with a handheld probe to monitor. For microbiological parameters (i.e. E.Coli) at present, for logistical reasons, it is much more sensible to use the project procured field kit which avoids the need for complicated logistics arrangements to send samples to labs in Honiara, where there is plenty of risk in terms of the sample being spoilt in transit or not reaching the lab in time due to frequently changing flight schedules. Some E.Coli testing has been done for desalination systems but is not yet comprehensive and work is ongoing to expand the monitoring to all sites as well as stick to a quarterly monitoring frequency. • Actioned and completed: Monitoring plan with associated log is established and operational at local/site level for routine basic operational/maintenance checks. • Not actioned: As water shortages are a common occurrence in Solomon Islands and in the pilot sites, it was not felt necessary to develop a contingency plan for low demand, and rather the strategy was taken to raise public awareness about the adaptation benefits of the systems, provide adequate access to the water through multiple tap stands, and to encourage careful management to ensure that there was some continual usage of the water during normal times, so that people were accustomed to it before the onset of water shortages. • Actioned and ongoing: Local, Provincial and National level

	MTR Recommendation	Action taken by the Project (text provided by the PMU)
		operating staff have been trained in operation and maintenance (O&M), initially by an international expert from the supplier and since, training/mentoring in O&M to local and • Provincial levels is being provided by National level PMU/Energy Division staff. • Actioned and completed: All five installed systems operational for over one year, primarily operated by trained community/government operatives based onsite, with blended remote and field support from national level from SIWSAP/WRD/Energy Division (MMERE). • Actioned and ongoing: all five units are continuously monitored at site and national level. Initial comparisons have been made between units in terms of their running times and outputs, however a full evaluation is yet to be made, and is recommended, with a summary report recommended to be produced and presented to interested SIG stakeholders (WRD/Energy/RWASH etc.) • Actioned and ongoing: Capital and operational cost analysis undertaken for one site and shared with WRD/RWASH, which will form the basis for a full evaluation to include all sites and which will be presented. • Actioned and ongoing: The communication strategy taken to allay the fears of users of the water, who were anticipated to be cautious about drinking the treated water, was to promote its benefits as a safe and healthy water, such as bottled water for sale in Provincial Centers and Honiara. Demonstration comparisons and water quality tests were undertaken at each site, to show that the desalinated water was similar to bottled water. • Actioned and ongoing: successful installations have been achieved in five sites, with one site pending, and may be installed by the project following Board Decision.
10.	**Address broader human security issues in project interventions.** Broader human security issues have not been considered in some cases. For example, the linkage between food security and water security is not addressed in the adaptation plan for the Santa Catalina community. Also, life safety (including fire safety) is not considered in water systems provided and planned for public buildings. The water sector adaptation plans should be critically reviewed in terms of broader human security concerns. A few examples of possible interventions include: a) In Santa Catalina, using one or more church buildings for water catchment might be sufficient to support community gardens (to be established near the churches) during the dry season; b) Also in Santa Catalina, procure rainwater harvesting tanks at the highland area where the community evacuates in cases of disasters; and c) Design and install simple life safety measures for public building water systems.	• Addressed and ongoing: Some broader human security issues have been addressed in project sites, such as installing water tanks in evacuation locations and improving designs for replica sites to be more disaster resilient, thus promoting security/safety. The key actions within the control of the project and those contributing to the objectives of the project have been actioned. • Actioned and ongoing: 2 x 10,000L tanks installed at the SSE Church, although the project believes it's a community decision on how the water will be used and the project promotes water conservation during the dry season and water use prioritized for drinking and cooking. It may be more appropriate to use hand dug well water if not too salty (22 hand dug well improvements were completed in Santa Catalina during 2018) • Actioned and completed: standalone rainwater harvesting tank installed on higher ground at the community evacuation point and at another uphill location. • Not actioned: Although a good recommendation, it is not in line with the project design and does not contributes towards the objective of the project. Will not be actioned.
11.	**Strengthen project monitoring & evaluation and management systems.** Streamline the project results framework. A few suggested modifications to the results framework are outlined in **Annex 6** of this MTR report. a) Implement critical path work planning, and integrate performance targets into the work plans.	• Addressed and ongoing: Project M&E and management systems have been strengthened through a streamlined Project Results Framework (PRF), improved work planning and increased frequency of Project Board Meetings, however, more can be done for tracking of co-financing, which requires acceleration in Q1 2018 prior to the Terminal Evaluation. • Actioned and completed: PMU worked closely with RTA

	MTR Recommendation	Action taken by the Project (text provided by the PMU)
	b) Increase frequency of project board meetings to twice per year. c) Regularly track cofinancing contributions, with input from cofinancing partners and support from the MDPAC. The cofinancing table in this MTR report could be used as a template	to streamline the PRF, taking into consideration the suggested modifications in Annex 6 of the MTR report. The revised proposed PRF was presented to the Project Board on 23/08/17 and approved in principle with some minor formatting changes required. Changes were made and shared with the Board and endorsed on 13/10/17. • Actioned and ongoing: Work planning has been strengthened year on year based on lessons learnt from previous years. • Actioned and ongoing: in 2017 there were two Board Meetings whereas in 2018 there was one due to unavailability of Board Members at the proposed time of the second meeting in December 2018. • Actioned and ongoing: MTR template was produced and template to track government co-financing obtained from another project (CB2) and data collection started in Jan 2018

3.2.2 Project finance & co-finance

1. In accordance with UNDP evaluation guidelines the TE includes an overall assessment of the financial aspects of the Project. However the TE team members are not accountants or financial auditors and no attempt has been made to verify the Project financial data provided by UNDP – these data are accepted at face value.

2. Table 6 shoes the original budget allocations as contained in the UNDP ProDoc. Table 7 shows the total Annual Workplan (AWP) budgets for each year of the Project, as approved by the Project Board, versus actual expenditure (giving an indication of expenditure rate as a percentage), based on the financial data provided by UNDP. Table 8 shows similar AWP versus actual expenditure data for each Project component, again based on the financial data provided by UNDP. A number of significant financial issued are noted by the TE team as follows:

    a) According to UNDP, in December 2018, the PMU developed an AWP budget of $818,000 for 2019 for based on remaining project balance after AWP 2018 was to be completed. However, when the financial reports for 2018 were finalized it was realized that the balance for the LDCF resources for the project was $195,000. There were multiple analyses conducted to understand why there was such a discrepancy and it was realized that in the last quarter of 2018 some Purchase Orders (POs) that had been open from 2017 were closed incurring additional expenditure. These PO figures were not incorporated in the 2018 AWP. Furthermore, there appeared to be overspent in the travel budget code due to higher travel costs than anticipated. The issue was discussed with the Project Board members to arrive at a solution.

    b) To remedy the issue, multiple steps were taken and an AWP 2019 of $457,000 was approved by the Project Board on 29 January 2019. This figure reportedly included $195,000 of LDCF funds and $413,000 from UNDP resources.

    c) Additional reductions in AWP activities worth SBD 1m (approx. $125K) were reportedly covered by Government contributions and therefore not requiring LDCF/UNDP funds, plus further reductions in costs for AWP activities related to staff and other project management costs and negotiations with contractors to reduce costs of some of the activities.

    d) Since January 2019 until June 2019, further resource mobilization, clearing up incorrect charges such

as the mobilization of additional UNDP Trac resources ($60K), cost reduction initiatives such as further negotiations with contractors as well as cost-sharing activities with other projects and Govt for example planned missions with Solomon Islands Meteorological Services, and savings from Human Resources as contracts came to end for international FTA positions were undertaken by the PMU and CO. This resulted in a final amended work plan of $**6,850,008.69** for 2019, which are GEF LDCF funding. When additional $213,000 from UNDP SOI and $200,000 from UNDP Bangkok regional office, amounting to a total of $7,263,008.69.

e) It is reported by UNDP that the shortfall experienced at the end of 2018 was approximately **$623,000**. The AWPs were developed and approved based on available funds. Therefore, the AWP figures in ATLAS and approved by the Project Board reflects the true nature of LDCF and UNDP resources that are channeled through the project. In this case for 2019 this amount was $**6,850,008.69**. Additional resources through Government assistance are not reflected in the AWPs, which in this case was SBD 1 million.

3. It was also reported that the Project budget in the project design failed to properly account for the very high costs of freight transport in the Solomon Islands, despite the fact that the Project required shipping large numbers of rainwater tanks and building materials to remote areas. Project budgets as contained in the Project design should be properly aligned and costed to the planned activities (Figure 5).

4. A Financial Audit was undertaken for UNDP by Lochan and Co Chartered Accountants for the period 1 January to 31 December 2018 (it is not clear why the audit did not go back to start of the Project). The audit report found that Project financial management was only "partially satisfactory" and highlighted several issues including inter alia:

   a) The Project Management should undertake comparison of actual expenditure with budget on periodical (say on quarterly) basis and identify the reason for significant variances.

   b) The Project Management should be more proactive and record the expenditure in the same period, to which it pertains or in which period, its provision is done in approved AWP.

   c) The Project Management should ensure that advances are recorded as advance and not as an expense.

   d) Further, the Project Management should ensure that the expenditure incurred is charged under the correct output / budget head.

   e) The Project Management should initiate a practice of conducting physical verification of project assets & equipment on periodic basis and documenting the same.

   f) The Project Management should ensure that the movement of assets is well documented so that the assets are very well controlled.

5. Given these findings, the still largely unexplained $623K over-spend in 2018 and the fact there has been significant further Project expenditure since the December 2018 audit, is strongly recommended that at financial closure the Project should be subjected to a highly detailed, forensic financial audit by independent, external auditors, including tracing all expenditure trails, over the full period of the Project. The audit findings should be used to inform appropriate response actions, including funds recovery and punitive action should any wrongdoing be identified.

6. With regard to co-financing, right from the TE inception phase the TE team requested the PMU to provide co-financing data in the standard UNDP-GEF co-financing table format – however this was only partially provided and with conflicting figures and lack of supporting explanation. The MTR report made a specific recommendation for the PMU to better track and report co-financing data – however this does not appear to have been implemented.

7. The figures marked with an asterix in the Project Data table on page 3 were provided by UNDP after review of the Draft TE Report. These all represent extremely significant shortfalls on what was committed at start of Project as listed in the left hand column of that table. Requests for an explanation of these figures from UNDP has not yielded a clear response – the TE team is therefore unable to offer an explanation.

8. It is recommended that for future projects the relevant PMU, and UNDP more broadly, should better track and report co-financing data.

TABLE 6: *Breakdown of Project Budget in Project Document (direct from ProDoc)*

Outcome	Year 1 US$	Year 2 US$	Year 3 US$	Year 4 US$	Year 5 US$	Total US$
Outcome 1:	355,800	236,722	162,653	99,955	0	**855,130**
Outcome 2:	115,688	621,557	692,482	360,703	0	**1,790,430**
Outcome 3:	295,057	1,436,367	775,312	605,623	0	**3,112,359**
Outcome 4:	39,138	334,750	231,728	144,597	0	**750,213**
Project Management:	68,348	97,990	74,290	101,240	0	**341,868**
Total:	**874,031**	**2,727,386**	**1,936,465**	**1,312,118**	**0**	**6,850,000**

TABLE 7*: Annual planned budgets, actual expenditures and implementation rate (data from UNDP)*

	2014 USD	2015 USD	2016 USD	2017 USD	2018 USD	2019 USD	Total up to TE 1 June 2019 USD
Planned budget (AWPs from UNDP)	31,668.14	835,787.18	1,879,209.25	2,514,694.33	1,798,924.49	608.294.80	7,664,578.19
Actual expenditure:	31,668.14	659,746.25	1,668,740.79	2,145,891.23	1,798,924.57	481,640.57	6,786,611.55
Implementation rate (%)	100%	79%	89%	85%	100%	79%	89%

TABLE 8*: Annual Work Plan (AWP) Budgets versus Actual Disbursements through to TE - 1 June 2019 (data from UNDP)*

Outcome	2014 (US$)	2015 (US$)	2016 (US$)	2017 (US$)	2018 (US$)	2019 (US$)	Cumulative (US$)
Outcome 1							
AWP Budget:	4,028.34	127,484.85	311,084.02	312,107.52	40,703.72	-	795,408.45
Disbursed:	4,046.30	130,438.41	311,090.88	269,081.53	41,668.11	403.40	756,728.63
Balance (AWP -Disbursed):	(17.96)	(2,953.56)	(6.86)	43,025.99	(964.39)	(403.40)	38,679.82
Outcome 2							
AWP Budget:		272,104.46	582,009.94	847,000.00	78,608.08	165,329.00	1,945,051.48
Disbursed:		248,431.50	582,009.94	890,025.99	78,608.08	80,267.94	1,879,343.45
Balance (AWP -Disbursed):	-	23,672.96	0.00	(43,025.99)	-	85,061.06	65,708.03
Outcome 3							
AWP Budget:		96,077.95	833,627.52	979,586.91	1,563,204.73	381,367.80	3,853,864.91
Disbursed:		45,469.61	627,152.19	610,783.81	1,563,204.74	165,712.15	3,012,322.50
Balance (AWP -Disbursed):	-	50,608.34	206,475.33	368,803.10	(0.01)	215,655.65	841,542.41
Outcome 4							
AWP Budget:		169,036.66	149,984.73	291,999.90	208,397.90	61,598.00	881,017.19
Disbursed:		78,476.09	149,984.73	137,125.52	208,397.90	10,702.84	584,687.08
Balance (AWP -Disbursed):	-	90,560.57	-	154,874.38	-	50,895.16	296,330.11
Project management							
AWP Budget:	27,639.80	171,083.26	(1,496.96)	84,000.00	(91,989.94)	-	189,236.16
Total Disbursed:	27,621.84	156,930.64	(1,496.95)	238,874.38	(92,954.26)	215.37	329,191.02
Balance (AWP -Disbursed):	17.96	14,152.62	(0.01)	(154,874.38)	964.32	(215.37)	(139,954.86)
Grand totals							
AWP Budget:	31,668.14	835,787.18	1,875,209.25	2,514,694.33	1,798,924.49	608,294.80	7,664,578.19
Total Disbursed:	**31,668.14**	**659,746.25**	**1,668,740.79**	**2,145,891.23**	**1,798,924.57**	**257,301.70**	**6,562,272.68**
Balance (AWP -Disbursed):	(0.00)	176,040.93	206,468.46	368,803.10	(0.08)	350,993.10	1,102,305.51

FIGURE 5: *Rainwater tanks being floated ashore and guided by canoes after delivery by cargo ship to Aurigi (Santa Catalina) Island. The extremely remote nature of many of the project sites presented significant logistical challenges to timely delivery of project outputs, and the original budget did not account for the high cost of sea-freight in the Solomon Islands. This is a lesson for project budget planning in future project designs (image: SIWSAP)*

3.2.3 M&E design & implementation

1. The Project Document (ProDoc) and its Project Results Framework (PRF) included a comprehensive, well developed M&E Plan with clearly articulated baselines and end-of-project targets and embracing both quantitative and qualitative indicators. The M&E framework set out in the PRF was aligned with the GEF Climate Change Adaptation Tracking Took (the Adaptation Monitoring & Assessment Tool - AMAT) and broader UNDP M&E Frameworks.

2. The M&E plan included using the UNDP ATLAS system to regularly update the Project risk analysis and to identify, report and act on any increasing risks, including financial risks. The M&E plan also included a requirement for financial audits in accordance with UNDP financial rules, regulations and policies.

3. The M&E budget in the ProDoc was within the required 5% of total GEF funding allocation for the Project, which is adequate to allow proper M&E without diverting disproportionate funding resources away from implementation of technical activities.

4. *Overall, the TE consultants consider that the M&E design as contained in the ProDoc is a good example of how a proper M&E Plan should be formulated, and can be used as a model for other similar projects.*

5. The Project Management Unit (PMU) generally adhered to the M&E Plan including reporting indicators and targets against the baselines as contained in the ProDoc / PRF. A number of significant strengths and positives in the way that the M&E Plan was implemented included:

    a) The PMU closely monitored and reviewed progress of site activities and sub-projects.

    b) The PMU developed scientifically-based technical performance criteria including minimum water supply to population ratios and used these for project planning and M&E.

    c) The PMU routinely collected, analysed and reported gender aggregated data to support M&E.

    d) The PMU produced the required Quarterly Progress Reports (QPRs), Annual Progress Reports (APRs) and Project Implementation Reviews (PIRs).

    e) A Mid Term Review (MTR) was undertaken in May 2017 and this Terminal Evaluation was undertaken in June 2019 in accordance with UNDP-GEF requirements.

6. However, there were some key deficiencies with M&E Plan implementation, including:

    a) While an Inception Workshop was held and is a significant part of the M&E process, the workshop did not did not review and revise the PRF, GEF Tracking Tool (AMAT) and M&E Plan, considering possible changes in indicators, baseline situation, targets, risk and assumptions and means of verification since project design. It was therefore not until after the MTR in May 2017 that the PRF and M&E Plan were reviewed and revised.

    b) Some key indicators were not tracked – for example the Knowledge, Attitude and Practice (KAP) assessment required as a baseline for measuring the impact of communication and awareness activities was not undertaken at the beginning of the Project and not re-done during or towards the end of the Project.

    c) Additionally, even though the Mid Term Review (MTR) found that the PMU was not properly tracking co-financing contributions and made recommendations to address this, co-financing has not be properly tracked since the MTR (May 2017).

    d) Although the M&E plan required UNDP to use the ATLAS system to regularly update the project risk analysis and to identify, report and act on any increasing risks, including financial risks, UNDP failed to track the significant over-expenditure of the project budget in 2018 which resulted in a major and unexplained short-fall of circa US$623K by end 2018. This necessitated the seeking of emergency funding from other UNDP sources and from the Solomon Islands Government (SIG), in order to complete the Project. *The TE sees this as a very serious failing, which should be investigated in detail further by UNDP.*

    e) While the M&E plan also included a requirement for financial audits in accordance with UNDP financial rules, regulations and policies, when the TE team enquired with UNDP if any such audits had been completed, a somewhat opaque response was received, and copy(ies) of Financial Audit Reports have not been provided to the TE team.

7. Given the significance of the unexplained 2018 over-spend outlined above, *it is recommended that at closure the Project should be subjected to a highly detailed, forensic financial audit by independent, external auditors, including tracing all expenditure trails.*

3.2.4 UNDP implementation & execution

1. The role of UNDP in this project included being both the Implementing Agency (IA) for GEF and the Executing Agency (EA) for the National Government (at the request of SIG), with the PMU being employed directly by UNDP but housed in the lead SIG Ministry (MMERE - WSD). Standard UNDP policies and procedures were used for all recruitment, procurement, project management and financial management.

2. Many positive aspects of UNDP's implementation of the Project were reported by stakeholders consulted during the TE, including:

    a) Both the UNDP Solomons Office and the PMU were highly active in driving and supporting the Project Board (PB) and were fully engaged in all aspects of the project from design and inception onwards, providing strong levels of support ranging from high-level strategic issues to detailed technical and administrative issues.

    b) Feedback was that PMU staff maintained an "open-door" policy whereby they could be approached for advice, assistance and support on any issue at any time.

    c) Satisfaction was also expressed with the level and quality of technical support provided by the UNDP Regional Technical Adviser (RTA) and the second Chief Technical Adviser (CTA) and other technical staff (although in the first half of the Project SIG officials questioned the value for money of the first CTA which resulted in an unacceptable 22 month period without a CTA).

    d) A major and highly commendable positive in UNDP's implementation of this Project was the emergency allocation of US$213 to help cover the unexpected (and as yet unexplained) budget shortfall at the end of 2018, thus allowing project completion to June 2019 (although it could be argued that because the shortfall was caused by a lapse in effective budget monitoring and management by UNDP, then it was UNDP's responsibility to plug this gap).

3. Some key dissatisfactions and deficiencies with UNDP implementation were reported, including the following:

    a) Without fail every stakeholder that was consulted during the TE identified slow and bureaucratic UNDP recruitment and procurement practices as being the most significant cause of delay to project implementation – with some processes taking many months. This was most likely a main contributing factor to the non-achievement of key project components such as sanitation (see below).

    b) There was a full six months delay from project-start to both the PM and CTA assuming duties – which is a huge setback for a project with an original time-frame of only 4 years. UNDP should endeavor to have all PMU staff fully engaged within 3 months of project start.

    c) The Project was completely without the key CTA position for nearly two years (22 months) right during the middle of the main implementation period.

d) The multiplicity of UNDP offices involved and the need for requests and approvals to be channeled back and forth between these offices before actions could be implemented on-the-ground added to delays and frustrations (relevant UNDP offices include the PMU housed within MMERE, the UNDP Solomons Office, the UNDP Pacific Office in Suva and the UNDP Asia-Pacific Office in Bangkok, as well as the UNDP RTA located in Sydney).

e) *It is strongly recommended that UNDP should take a very serious look at streamlining its project management, recruitment and procurement procedures to drastically improve efficiency of delivery of such projects.*

4. The significant lapses in budget monitoring and management outlined above also detract from the quality of UNDP's implementation of this Project.

5. As outlined above UNDP was both the IA and the EA and the comments on the quality of UNDP's implementation of this Project under 2.1 also apply to this section. Some additional, tactical-level comments relating to the performance of the PMU, as the main "executer", are also provided.

6. All PMU staff and especially the two PMs exhibited extremely high levels of enthusiasm, commitment, work ethic and management capability, effectiveness and efficiency.

7. Every single stakeholder that was consulted by the TE team expressed the highest levels of respect and appreciation for the efforts and effectiveness of the two PMs and the PMU as a whole, and expressed strong appreciation for the project as a whole, which overall is seen by all stakeholders as highly beneficial.

8. The PMU developed and followed clear and detailed workplans, and most project outputs and targets have been achieved (especially rating to improving the resilience of water security), which is the most important indicator of the quality of execution (although there are some significant gaps such as sanitation – see below).

9. The results of M&E activities including the MTR have been effectively taken on by the PMU and the project design and implementation have been effectively adapted as required.

10. Some key dissatisfactions and deficiencies with UNDP execution were reported, including:

a) Project organization and reporting arrangements and collaboration with SIG and other partners were weak during the first half of the project, although this appears to have been addressed after the MTR.

b) For some Provinces, beneficiary communities reported poor engagement, communication and support from both the UNDP-contracted Provincial Project Officers (PPOs) and from the Provincial Governments (PGs) themselves.

3.3 Evaluation of Project Results

3.3.1 Overall results (attainment of objective & targets)

(please also refer Table A in the Executive Summary)

1. The overall Project Objective is to improve the resilience of water resources to the impacts of climate change in order to improve health, sanitation and quality of life, and sustain livelihoods in targeted vulnerable areas. Improving the resilience of water resources to the impacts of climate change at the pilot and replica sites has been the major achievement of the Project, mainly through rainwater tanks, desalination/filtration plants for improving groundwater and installing & rehabilitating wells, plus installation of early warning systems.

2. Table 10 presents some key data about the achievements of SIWSAP and Table 11 provides an overview of all activities and outputs to June 2019.2s 6 to 11 show examples of some of these.

3. As outlined in Table A in the Executive Summary, of a total of 23 targets (Target 2.1 is split into two for this assessment), 12 targets have been fully achieved, 8 targets have been partially achieved, and 3 targets have not (and will not) be achieved by Project-end. This represents:

    - a full achievement rate of 52%
    - a partial achievement rate of 35%
    - a failure rate of 13%

4. The main area of under-achievement was a general lack of progress with the project targets relating to sanitation. It was difficult for the TE team to establish the exact reasons for this lack of progress however the following appear to have been key contributing factors:

    a) The overall project design was extremely ambitious given the available resources and initial four-year time-line. It was therefore necessary for the PMU to prioritise, with water security and resilience being a logical priority and precursor to addressing sanitation. This is a lesson for project design and adequate resourcing.

    b) The general inefficiencies and long delays in UNDP project management, recruitment and procurement processes hampered timely delivery of many key project activities, including a full six month delay between project start and commencement of the PM and initial CTA.

    c) Despite the infrastructure focus of the Project, including in relation to improving sanitation, the Project design did not include a Civil Engineer as a PMU staff position. It was not until November 2017 (more than 3 years after project start), after much lobbying by the PM, that a Civil Engineer was engaged. Had this position been in place from project start, greater progress might have been made.

    d) Additionally, after departure of the initial CTA in July 2015 (after only six months of duty), the project was without a CTA for nearly two years, until a new CTA commenced in June 2017. It is understood that the reason for this critical gap was that SIG was staunchly opposed to engaging a replacement CTA, because it is an international position (UN level P4). These positions consume a significant part of the project budget, which SIG preferred to allocate to in-country activities. However, given the highly technical nature of the Project, including the sanitation components,

there is no doubt that lack of a CTA would have been a major factor in lack of Project delivery. The TE considers that it was a strategic error to have left this key position unfilled for so long.

e) The SIG Ministry of Health & Medical Services had adopted an EU-funded Community Led Total Sanitation (CLTS) policy, which reportedly (and inexplicably) prohibits the application of subsidized sanitation solutions in Solomon Islands communities – and which for some reason SIWSAP felt obliged to comply with. The TE team cannot fathom the rationale for such a policy, it is extremely clear that in order to improve sanitation in Solomon Islands communities, solutions most definitely need to be subsidized, at least for the capital stages.

5. There was also opposition from some communities to some sanitation solutions proposed by SIWSAP for cultural reasons – for example compositing toilets where there is opposition to having to handle by-products, even though they are completely safe. Some communities also stated that communal toilets are not appropriate due to lack of ownership which means that cleaning and maintenance become a problem – they said that each household needs to have their own toilet, which they own and therefore care for. On Aurigi (Santa Catalina) Island we were shown a previous community toilet project which had failed for these reasons (Figure 11).

6. However, at other communities such as Taro there was full support for the proposed public toilets, and the Provincial Government is extremely dissatisfied that the Project did not deliver on its commitment there.

7. The other main area where the Project under-achieved was a general lack of uptake and replication of SIWSAP successes and best practices at the Provincial and National levels. The exact reasons for this are also not clear but almost certainly include some of the factors listed for sanitation above. Given the highly ambitious overall workload, it was also necessary for the PMU to focus heavily on the pilot and replica sites in order to make good progress there, at the expense of Provincial and National level activities. This is a lesson for project design and adequate resourcing.

8. Given the extremely high level of satisfaction with the Project that was expressed by all community stakeholders consulted during the TE, if were not for the various issues identified against the various categories above, the Project could theoretically have achieved at Overall Project Outcome rating of Highly Satisfactory. However, according to the UNDP-GEF Rating Scales, a Highly Satisfactory rating requires that there are no shortcomings at all, which is virtually impossible for any project. In the real world nothing can ever be 100% perfect, and there were some shortcomings identified for this project, including a full target achievement rate of only 48%, as outlined above.

9. Overall, the TE is if the view that ALL parties involved in this Project **deserve the highest commendation**.

TABLE 10: *Key data about the achievements of SIWSAP **to June 2019***

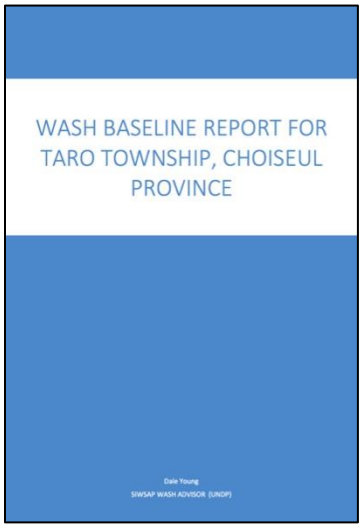
	Achievement	Key Data
1	No. of Community Water Committees (CWCs) established:	**12** (6 Pilot Sites and 6 Replica Sites)
2	No. of Water, Sanitation & Health (WASH) Baseline Surveys completed:	**6** (all Pilot Sites)
3	No. of Groundwater Assessments (GWAs) completed:	**6** (all Pilot Sites)
4	No. of Feasibility Assessments (FAs) completed:	**6** (all Pilot Sites)
5	No. of Climate Change Vulnerability Assessments (CCVAs) completed:	**6** (all Pilot Sites)
6	No. of Water Sector Climate Change Adaptation Response Plans (WS-CCARPs) completed:	**6** (all Pilot Sites)
7	No. of Integrated Vulnerability Assessment (IVAs) completed:	**6** (all Replica Sites)
8	No. of Automatic Hydrometric Weather Stations (Early Warning Systems) (EWS) installed:	**4** (Taro, Tigoa, Santa Catalina & Tuwo)
9	No. of rainwater tanks and supporting infrastructure installed:	**229**
10	No. of groundwater wells rehabilitated:	**52**
11	No. of Trunz solar-powered groundwater desalination systems installed:	**5** (all Pilot Sites except Tigoa)
12	No. of Trunz solar-powered groundwater filtration systems installed:	**1** (Tigoa)
13	No. of community members trained in basic operation of the Trunz system:	Total **38**. Male: **34** Female: **4**
14	Total additional water supply volume of all rainwater tanks installed:	**1,325,000** litres
15	Total additional water supply volume from all Trunz systems installed:	**2,600** litres
16	No. of people supported with fully resilient water supply options:	Total: **3,830.** Male: **2,108** Female: **1,722**
17	No. of people supported with partially resilient water supply options:	Total 7,955. Male: Female: 5,095
18	Total number of community beneficiaries:	Total **11,785**. Male: **5,912** Female: **5,095**
19	No. of participants in the 2017 and 2018 National Water Forums.	Total 124. Male: 96 Female: 28
20	No. of Project Board meetings held:	**7**
21	No. of Project Advisory Group meetings held:	**3**
22	No. of MoUs signed between Community, Provincial and National Governments:	**3** (Tigoa, Tuwo, Santa Catalina)
23	Total funds spent (US$):	GEF: $ 6,849,950.11. UNDP: $ 829,406. SIG: $ 829,406

TABLE 11: *Overview of all activities and outputs achieved by the Project **to June 2019***

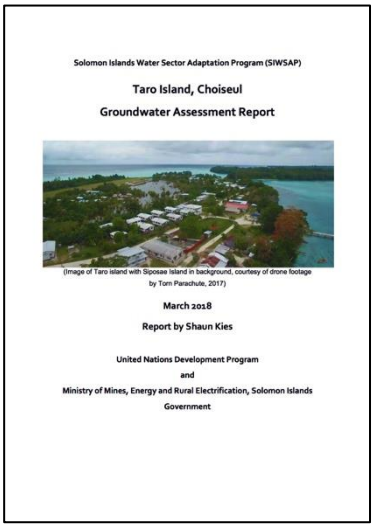
Scale	Activities / Outputs delivered by SIWSAP
National Scale Activities & Outputs:	• National-level coordination and cooperation through Project Board and Project Advisory Group. • 2018 Training Guideline on Integrated Vulnerability Assessment & Water Sector Climate Change Adaptation Response Planning (to assist National replication of SIWSAP methods). • 2018 National Water & Climate Change Forum. • 2017 National Water Forum. • 2016 National Feedback session. • Purchase of 1 x Resistivity Meter for use by WSD in groundwater resource mapping. • Purchase of 6 x ManPac HF Radios for use by NDMO in disaster response. • Purchase of spare parts for five years maintenance of Trunz desalination/ filtration plants at the six Pilot Sites, held at WSD.
Provincial Scale Activities & Outputs:	• No specific activities and outputs however both the National and the Pilot Site activities and outputs provide best practice models that can be applied at the Provincial scale.
Pilot Site Activities & Outputs:	
Choiseul Province - **Taro Town**:	• Establishment of Community Water Committee (CWC). • Completion of Water, Sanitation & Health (WASH) Baseline Survey. • Completion of Groundwater Assessment (GWA). • Completion of Feasibility Assessment (FA) • Completion of Climate Change Vulnerability Assessment (CCVA). • Completion of Water Sector Climate Change Adaptation Response Plan (WS-CCARP). • Installation of Automatic Hydrometric Weather Station (Early Warning System) (EWS) (handed over to Met Division for operation). • Installation of 33 rainwater tanks and supporting infrastructure (8 as part of "Quick Fix" and 25 as follow-up adaptation component). • Yearly routine maintenance and chemical cleaning of desalination unit. • Rehabilitation of 5 and establishment of 1 new groundwater wells. • Installation of 1 x Trunz solar-powered brackish desalination system and associated storage tanks, reticulation pipes, community taps and associated infrastructure. • Training of 11 community members in basic operation of the Trunz system. • Participation of 7 community members in the 2017 and 2018 National Water Forums. • Drafting of MoU between Community, Provincial and National Governments for ongoing operation and maintenance of facilities established in the community by SIWSAP (MoU is still with Provincial Government for signing). • Installation of 3 x 10,000L rainwater tanks and 1 x 10,000L header tank piped into the new Maternity Ward at Taro Hospital. • Operations and maintenance training for stakeholders in Taro, Supizae and Choiseul bay. • Taro dumpsite rehabilitation project - concept, designs, BoQ and estimates. • Engineering feasibility assessment and designs, BoQ and cost estimate drawn up for a public toilet in Taro.
Western Province - **Gizo Town** (Provincial Capital):	• As per other Pilot Sites establishment of CWC and completion of WASH Baseline, GWA, FA, CCVA & WS-CCARP. • Automatic weather station installed at Jah Mountain and Hydrometric unit at Leoko dam. • Installation of 28 rainwater tanks and supporting infrastructure (12 as part of "Quick Fix" and 16 as follow-up adaptation component). • Rehabilitation of 3 groundwater wells. • Installation of 1 x Trunz solar-powered groundwater desalination system and associated storage tanks, reticulation pipes, community taps and associated infrastructure. • Yearly routine maintenance and chemical cleaning of desalination unit. • Training of 11 community members in basic operation of the Trunz system. • Participation of 7 community members in the 2017 and 2018 National Water Forums. • Rehabilitation of Gizo Township water supply (contract signed and implementation is in progress). • Drafting of MoU between Community, Provincial and National Governments for ongoing operation and maintenance of facilities established in the community by SIWSAP (MOU is

Scale	Activities / Outputs delivered by SIWSAP
	still with Provincial Government for signing). • Grant agreement with Ecological Solutions Solomon Islands (ESSI) to conduct community awareness workshops for Gizo and surrounding communities on water conservation, protection of groundwater sources, water hygiene and sanitation, water and climate change.
Malaita Province - **Ferafalu Village**:	NOTE: Ferafalu was terminated as a Pilot Site in Feb 2018 due to a community land dispute and activities shifted to the Replica Site at Kwai Island, so activities and outputs at Ferafalu are not as complete as for the other Pilot Sites. • As per other Pilot Sites establishment of CWC and completion of WASH Baseline, FA, CCVA & WS-CCARP. • GWA not completed. • EWS not installed. • Trunz desal system not installed. • Installation of 10 x 5,000L rainwater tanks and supporting infrastructure (10 as part of "Quick Fix" and 5 as follow-up adaptation component). • Rehabilitation of 4 x groundwater wells. • Participation of 3 community members in the 2017 National Water Forum.
Makira Province - **Santa Catalina (Aurigi) Island**:	• As per other Pilot Sites establishment of CWC and completion of WASH Baseline, GWA, FA, CCVA, WS-CCARP & EWS. • Installation of 53 rainwater tanks and supporting infrastructure (11 as part of "Quick Fix" and 42 as follow-up adaptation component). • Rehabilitation of 22 x groundwater wells. • Installation of 1 x Trunz solar-powered groundwater desalination system and associated storage tanks, reticulation pipes, community taps and associated infrastructure. • Yearly routine maintenance and chemical cleaning of desalination unit. • Training of 4 community members in basic operation of the Trunz system. • Participation of 7x community members in the 2017 and 2018 National Water Forums. • Drafting of MoU between Community, Provincial and National Governments for ongoing operation and maintenance of facilities established in the community by SIWSAP (MOU is still with Provincial Government for signing).
Rennell-Belona Province - **Tigoa Town** (Provincial Capital):	• As per other Pilot Sites establishment of CWC and completion of WASH Baseline, GWA, FA, CCVA, WS-CCARP & EWS. • Installation of 30 rainwater tanks and supporting infrastructure (14 as part of "Quick Fix" and 16 as follow-up adaptation component). • Installation of 1 x Trunz solar-powered groundwater fresh water filtration system and associated storage tanks, reticulation pipes, community taps and associated infrastructure (note Tigoa system is filtration not desalination as per other sites, based on groundwater at Tigoa). • Yearly routine maintenance and chemical cleaning of filtration unit • Training of 6 community members in basic operation of the Trunz system. • Participation of 8 community members in the 2017 and 2018 National Water Forums. • Signing of MoU between Community, Provincial and National Governments for ongoing operation and maintenance of facilities established in the community by SIWSAP (MOU has been signed by the provincial government and now with WRD-MMERE for countersigning).
Temotu Province - **Tuwo Island**:	• As per other Pilot Sites establishment of CWC and completion of WASH Baseline, GWA, FA, CCVA, WS-CCARP & EWS. • Installation of 28 rainwater tanks and supporting infrastructure (9as part of "Quick Fix" and 19 as follow-up adaptation component). • Rehabilitation of 20 groundwater wells. • Installation of 1 x Trunz solar-powered brackish desalination system and associated storage tanks, reticulation pipes, community taps and associated infrastructure. • Yearly routine maintenance and chemical cleaning of desalination unit • Training of 4 community members in basic operation of the Trunz system. • Participation of 6 community members in the 2017 and 2018 National Water Forums. • improved Sanitation facilities built for 3 identified persons with disability • Drafting of MoU between Community, Provincial and National Governments for ongoing operation and maintenance of facilities established in the community by SIWSAP (MOU is still with Provincial Government for signing).

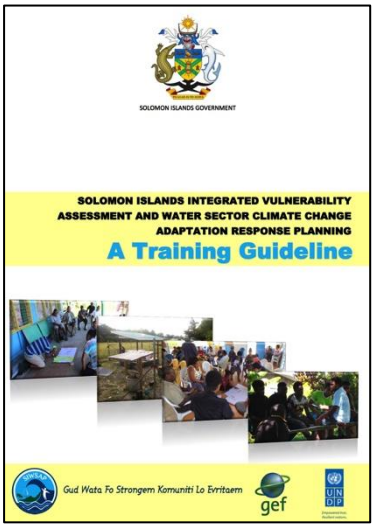
Scale	Activities / Outputs delivered by SIWSAP
<u>Replica Site</u> Activities & Outputs	
Choiseul Province - **Poroporo Village**:	• Establishment of Community Water Committee (CWC). • Completion of Integrated Vulnerability Assessment & Water Sector Climate Change Adaptation Response Plans (IVAs). • Installation of 5 x 5000L rainwater tanks and supporting infrastructure (in progress). • Drafting of MoU between Community, Provincial and National Governments for ongoing operation and maintenance of facilities established in the community by SIWSAP (will be signed after completion of tank installations).
Western Province - **Vonunu Village**:	• Establishment of Community Water Committee (CWC). • Completion of Integrated Vulnerability Assessment & Water Sector Climate Change Adaptation Response Plans (IVAs). • Installation of 4 x 10,000L and 4 x 5,000L rainwater tanks and supporting infrastructure. • Participation of 1 community members in the 2018 National Water Forums. • Drafting of MoU between Community, Provincial and National Governments for ongoin operation and maintenance of facilities established in the community by SIWSAP (will be signed after completion of tank installations).
Malaita Province - **Kwai Island**:	• Establishment of Community Water Committee (CWC). • Completion of Integrated Vulnerability Assessment & Water Sector Climate Change Adaptation Response Plans (IVAs). • Installation of 6 x 5,000L rainwater tanks and supporting infrastructure (in progress). • Rehabilitation of 3 hand dug wells (in progress). • Participation of 1 community members in the 2018 National Water Forums. • Drafting of MoU between Community, Provincial and National Governments for ongoing operation and maintenance of facilities established in the community by SIWSAP (will be signed after completion of tank installations and well rehabilitation).
Malaita Province - **Fiu Village**: (2ndary Replica Site for Malaita)	• Installation of 1 x Trunz solar-powered brackish desalination system and associated storage tanks, reticulation pipes, community taps and associated infrastructure. (this was installed at Fiu Village because the groundwater recharge rate at the primary Replica Site of Kwai is not adequate for the desal unit)
Makira Province - **Kira Kira Town** (Provincial Capital):	• Establishment of Community Water Committee (CWC). • Completion of Integrated Vulnerability Assessment & Water Sector Climate Change Adaptation Response Plans (IVAs). • Installation of 7x rainwater tanks and supporting infrastructure. • Piping of water supply to hand washing basin. • Participation of 1 community members in the 2018 National Water Forums. • Drafting of MoU between Community, Provincial and National Governments for ongoing operation and maintenance of facilities established in the community by SIWSAP (will be signed after completion of tank installations).
Rennell-Bellona Province - **Lavagu Village**:	• Establishment of Community Water Committee (CWC). • Completion of Integrated Vulnerability Assessment & Water Sector Climate Change Adaptation Response Plans (IVAs). • Installation of 10 x rainwater tanks and supporting infrastructure. • Participation of 1 community members in the 2018 National Water Forums. • Drafting of MoU between Community, Provincial and National Governments for ongoing operation and maintenance of facilities established in the community by SIWSAP (will be signed after completion of tank installations).
Temotu Province - **Lata Town** (Provincial Capital):	• Establishment of Community Water Committee (CWC). • Completion of Integrated Vulnerability Assessment & Water Sector Climate Change Adaptation Response Plans (IVAs). • Installation of 8x rainwater tanks and supporting infrastructure. • Completion of water supply piped into sanitation block and hand washing basin. • Participation of 1 community members in the 2018 National Water Forums. • Drafting of MoU between Community, Provincial and National Governments for ongoing operation and maintenance of facilities established in the community by SIWSAP (will be signed after completion of tank installations).



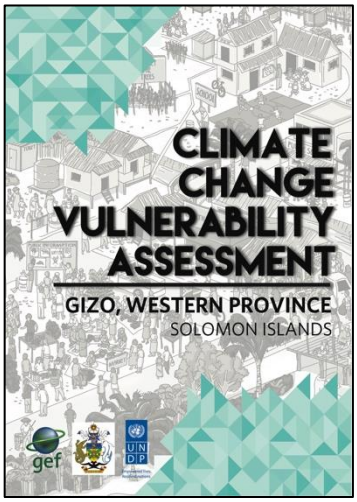
WASH Baseline Report (all 6 pilot sites)



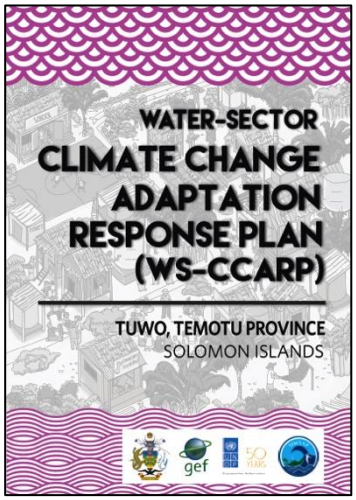
Groundwater Assessment (all 6 pilot sites)



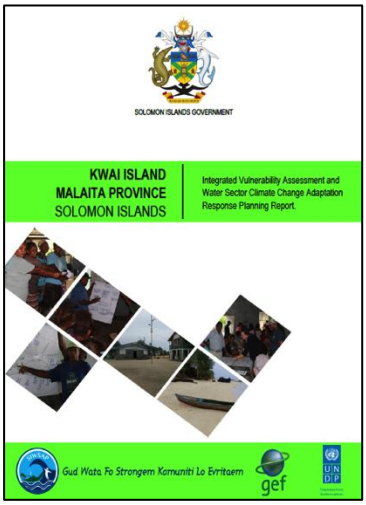
Training Guidelines (to support replication)



CCVA (all 6 pilot sites)



WS-CCARP (all 6 pilot sites)



IVAs (all 6 replica sites)

FIGURE 6: *Examples of the technical studies and reports, which form significant and highly useful outputs of SIWSAP. These provide essential baseline assessments and action plans for guiding water sector climate change adaptation at each site and more broadly in each Province (source: SIWSAP)*

FIGURE 7*: An example of one of the Trunz solar-powered groundwater desalination system and associated storage tanks, reticulation pipes, community taps and associated infrastructure (this one at Taro) (source: SIWSAP)*

FIGURE 8: *The main boost to water security and resilience from SIWSAP has been from the installation of rainwater tanks (left) and the rehabilitation of groundwater wells (right) (source: Raaymakers)*

FIGURE 9: *SIWSAP has made effective use of signage to assist communities to manage and maintain their new water infrastructure properly (source: Raaymakers)*

FIGURE 10*: Two examples of the Automatic Hydrometric Weather Stations (Early Warning Systems) that have been established by SIWSAP at four sites (Taro, Santa Catalina, Tigoa and Tuwo) (these are at Taro left and Tuwo right)(source: SIWSAP)*

FIGURE 11: *A previous community toilet project at Aurigi (Santa Catalina) Island which has failed due to lack of ownership for cleaning and maintenance, and which is not considered culturally appropriate. The community advised that each household should have their own toilet, which they own and therefore care for (image: Raaymakers)*

3.3.2 Relevance

1. All project components, outcomes & outputs are assessed as being highly relevant to:

    a) GEF CCA Focal Area Objectives:
        - CCA-1: Reduce vulnerability to the adverse impacts of CC, including variability, at local, national, regional and global levels.
        - CCA-2: Increase adaptive capacity to respond to the impacts of CC, including variability, at local, national, regional and global levels.
        - CCA-3: Promote transfer and adoption of adaptation technology.

    b) UNDAF (Pacific Region 2013-17) Outcome 1.1: By 2017 the most vulnerable communities across the PICTs are more resilient and select government agencies, civil society organizations and communities have enhanced capacity to apply integrated approaches to environmental management, climate change adaptation/mitigation and disaster risk management.

    c) UNDAF (Pacific Region 2013-17) Outputs:
        - Output 1.1.1: Strengthened capacity to integrate and implement policies/strategies for environmental sustainability, disaster risk reduction/management and climate change adaptation and mitigation at national level.

        - Output: 1.1.3: Strengthened national capacity for effective management of natural and water resources, renewable energy, waste, land and land rehabilitation that promote good agricultural practices for conservation of the environment and biodiversity.

    d) UNDP Strategic Plan E&SD Primary Outcome: Outcome 1: Growth is inclusive and sustainable, incorporating productive capacities that create employment and livelihoods for the poor and excluded

    e) SIG National Development Strategy (NDS) 2011 - 2020, National Adaptation Program of Action (NAPA) 2008 & National Water and Sanitation Sector Plan - 2007.

f) Provincial and community needs and priorities.

2. The Project is also found to be highly relevant to most of the UN Sustainable Development Goals (SDGs) (refer section 3.3.5 below).

3.3.3 Effectiveness

1. It is very clear that the Project has been extremely effective in achieving the overall objective to improve the resilience of water resources to the impacts of climate change in order to improve health, sanitation and quality of life, and sustain livelihoods, in the targeted vulnerable areas.

2. The project has been extremely effective at improving water security and resilience to climate change at bot the six pilot sites and six replica sites, through diversified water supply options, including (depending on the site) rainwater tanks, improved groundwater supply and new and/or rehabilitated wells, as well as early warning systems.

3. The level of satisfaction with the Project expressed by all community stakeholders consulted during the TE is extremely high. All stakeholders reported that the level of effectiveness of this Project is much higher than for similar projects that they have been involved with.

4. The effectiveness of SIWSAP has been enhanced by the fact that the quality of most of the products and outputs delivered by the Project is very high, for example:

   a) The reports on scientific and technical studies, including the pilot site Climate Change Vulnerability Assessments (CCVAs), Water Sector Climate Change Adaptation Response Plans (WS-CCARPs) and Groundwater Assessments, and the replica site Integrated Vulnerability Assessment / Response Plans (IVAs), are all found to be scientifically and technically rigorous, professionally written and well presented. These technical reports included user-friendly graphics and simplified visual reporting icons, which present complex technical data in easy-to-understand formats. As such they provide a strong basis for guiding water sector climate change adaptation at each site and more broadly in each Province. This is a positive finding as often in such projects technical reports can be of poor quality, and the PMU and their technical consultants should be commended for ensuring that high quality was achieved (Figure 12).

   b) User-friendly graphics and simplified visual reporting icons where also developed for the data output reports from the Pilot Site Automatic Hydrometric Weather Stations – which build water security resilience by providing early warning of impending water shortages (Figure 13), and also for the Water Management Guidelines developed for each community by SIWSAP (Figure 14). The PMU and its consultants should be commended for this focus on ensuring the “user-friendliness” of these outputs.

   c) Project effectiveness was also enhanced through production of a number of high quality communication and awareness products, including excellent “Vulnerable vs Resilient Village” posters, which promote key messages visually through a context-relevant art style (Figure 15).

   d) An outstanding observation is that the quality of physical infrastructure built by the project is very high compared to other related projects, including those located immediately adjacent where direct visual comparison can be made. This bodes well for physical sustainability and community stakeholders commented positively on this aspect (Figures 16 & 17).

5. Unfortunately, as outlined above for a number of reasons the Project was not effective at all in delivering on those components relating to sanitation and Provincial- and National-level uptake.

6. We would have considered an Effectiveness Rating of Highly Satisfactory however at June 2019 (near Project end) a number key targets have only been partially achieved and some have not been achieved at all, and will not be achieved by end of June (especially those relating to sanitation and Provincial- and National-level uptake) (refer Table A: Project Achievements Summary). We have therefore allocated an Effectiveness Rating of Satisfactory.

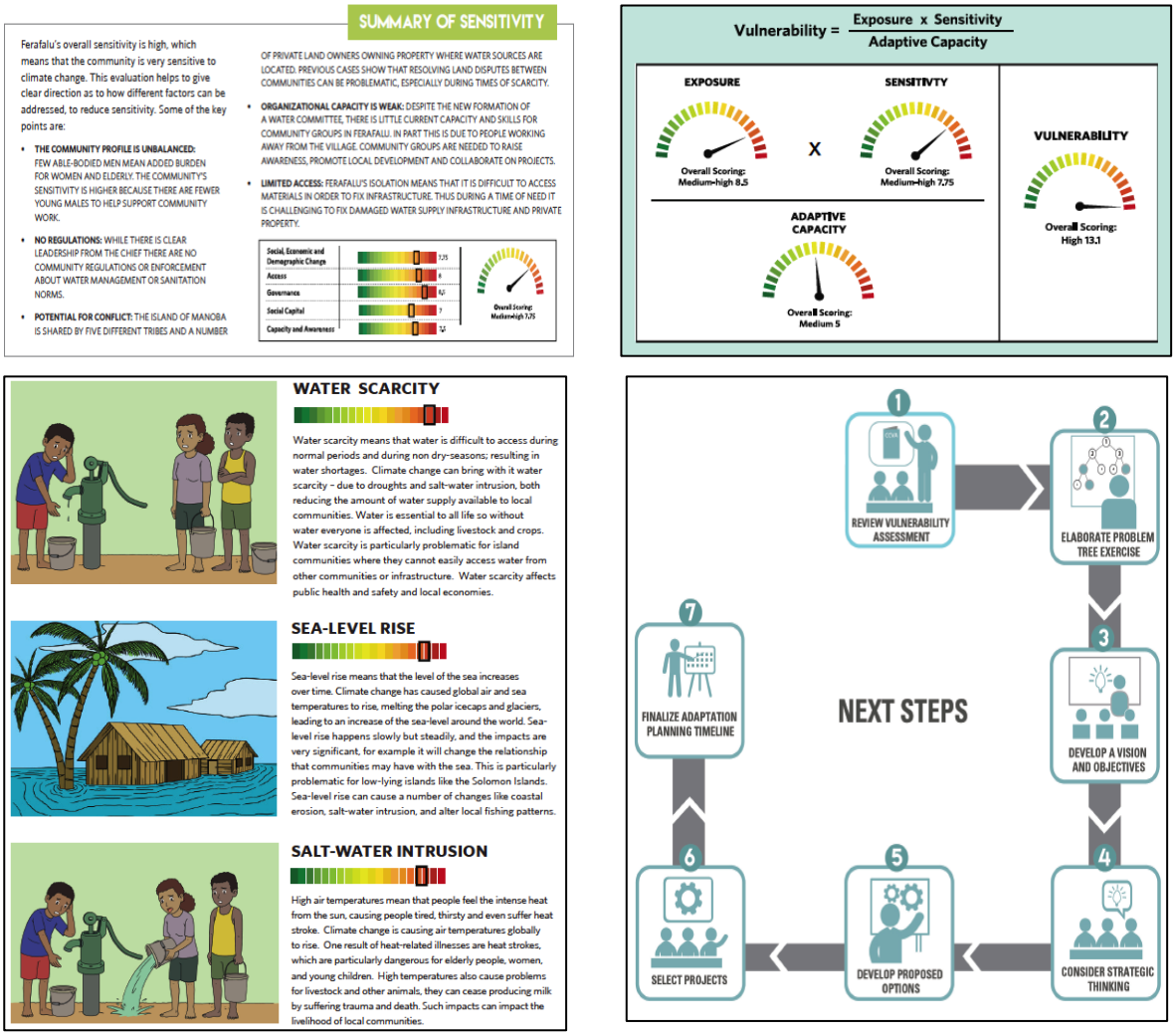
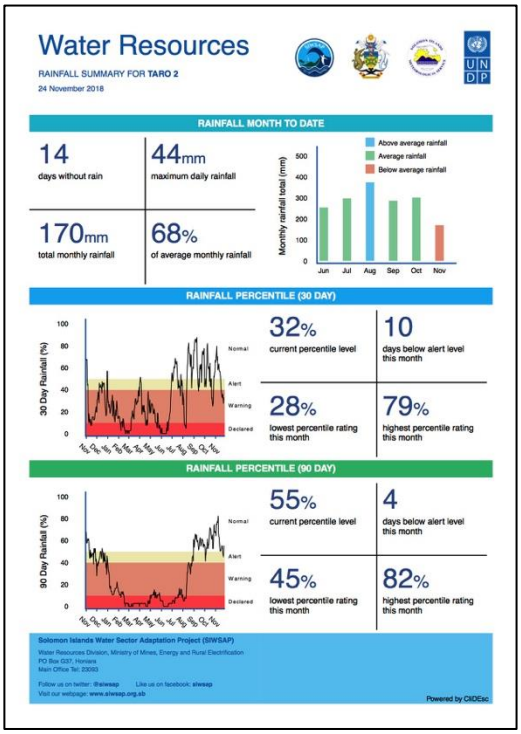
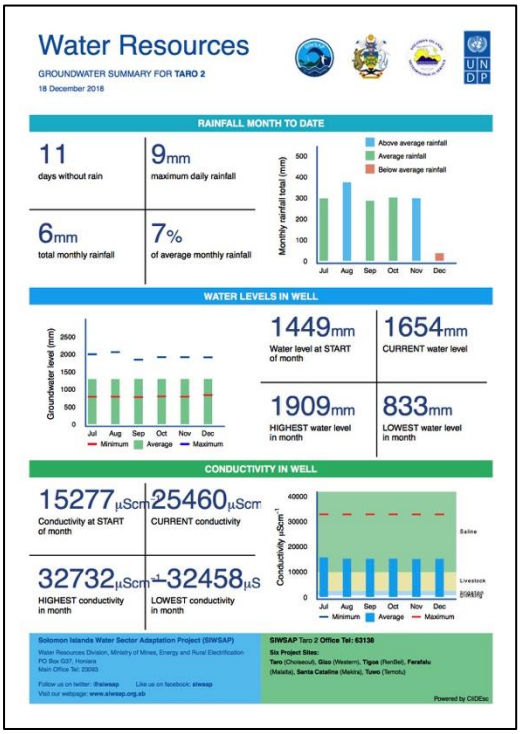


FIGURE 12*: Examples of the content of a CCVA report produced by SIWSAP showing the user-friendly graphics and simplified visual reporting icons, which present technical data in easy-to-understand formats (source: SIWSAP)*



Early Warning System Output - **Rainfall**



Early Warning System Output - **Groundwater**

FIGURE 13*: Examples of data outputs from the Pilot Site Automatic Hydrometric Weather Stations – which build water security resilience by providing early warning of impending water shortages – allowing contingency plans to be implemented. These data reports are based on user-friendly graphics and simplified visual reporting icons, which present technical data in easy-to-understand formats – enhancing the effectiveness of this output (source: SIWSAP)*

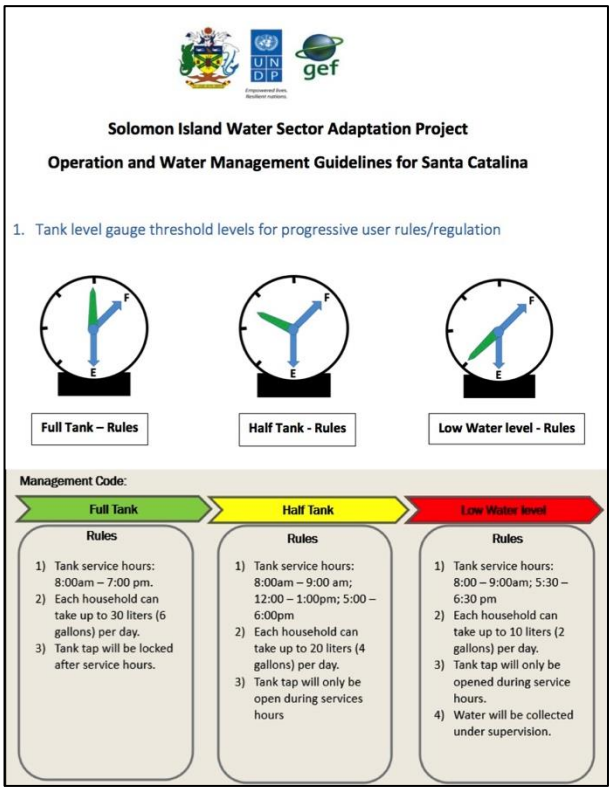
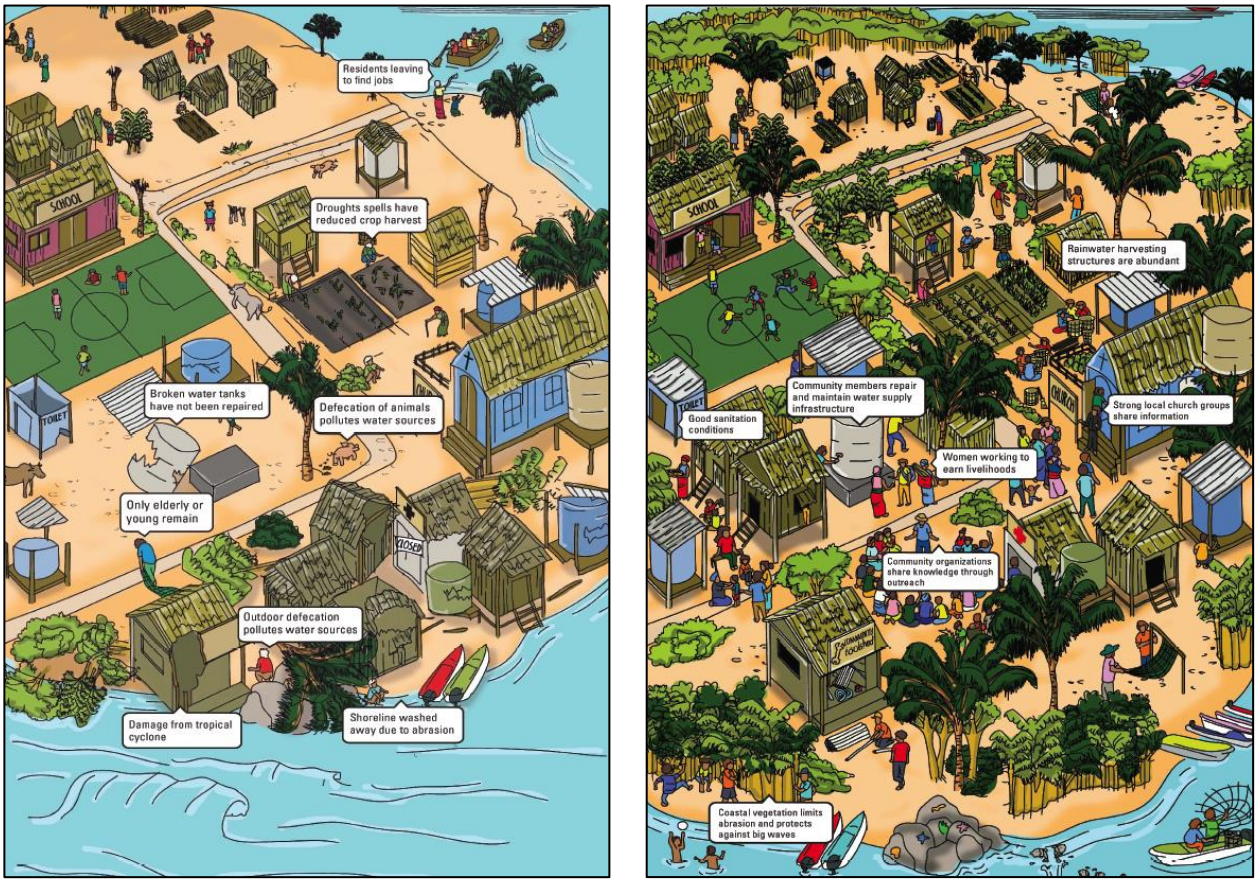


FIGURE 14*: Examples of the user-friendly graphics and simplified visual reporting icons used for the Water Management Guidelines developed for each community by SIWSAP (source: SIWSAP)*



Vulnerable Village

Resilient Village

FIGURE 15: *The excellent "Vulnerable vs Resilient Village" posters, which promote key messages visually through a context-relevant art style (source: SIWSAP)*

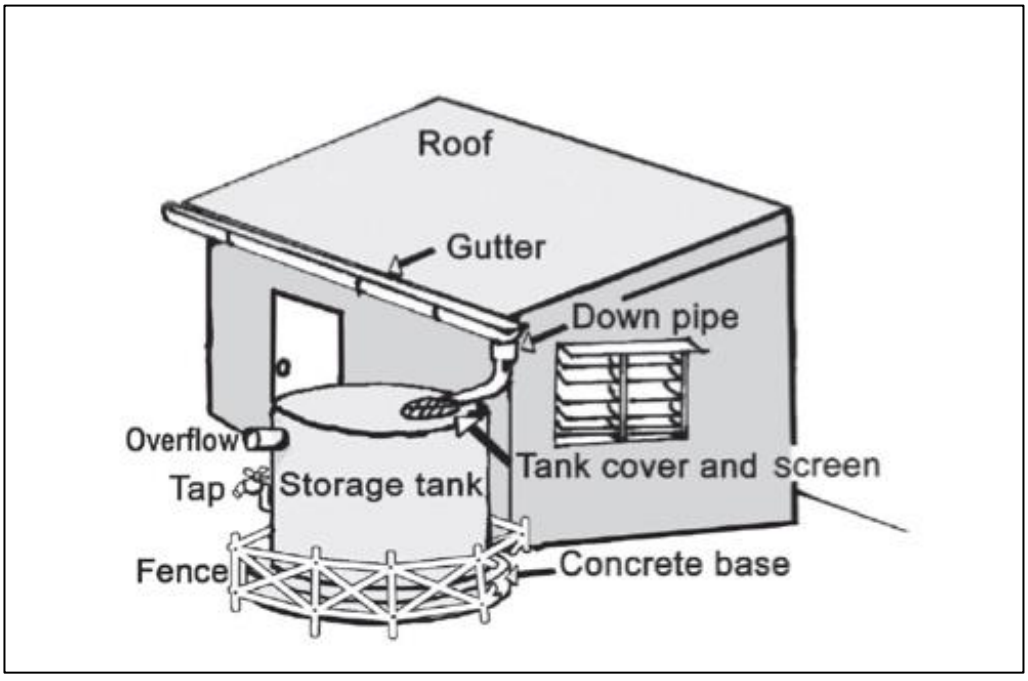


FIGURE 16: *Standard best-practice design for rainwater tanks as used by SIWSAP (source: SIWSAP)*

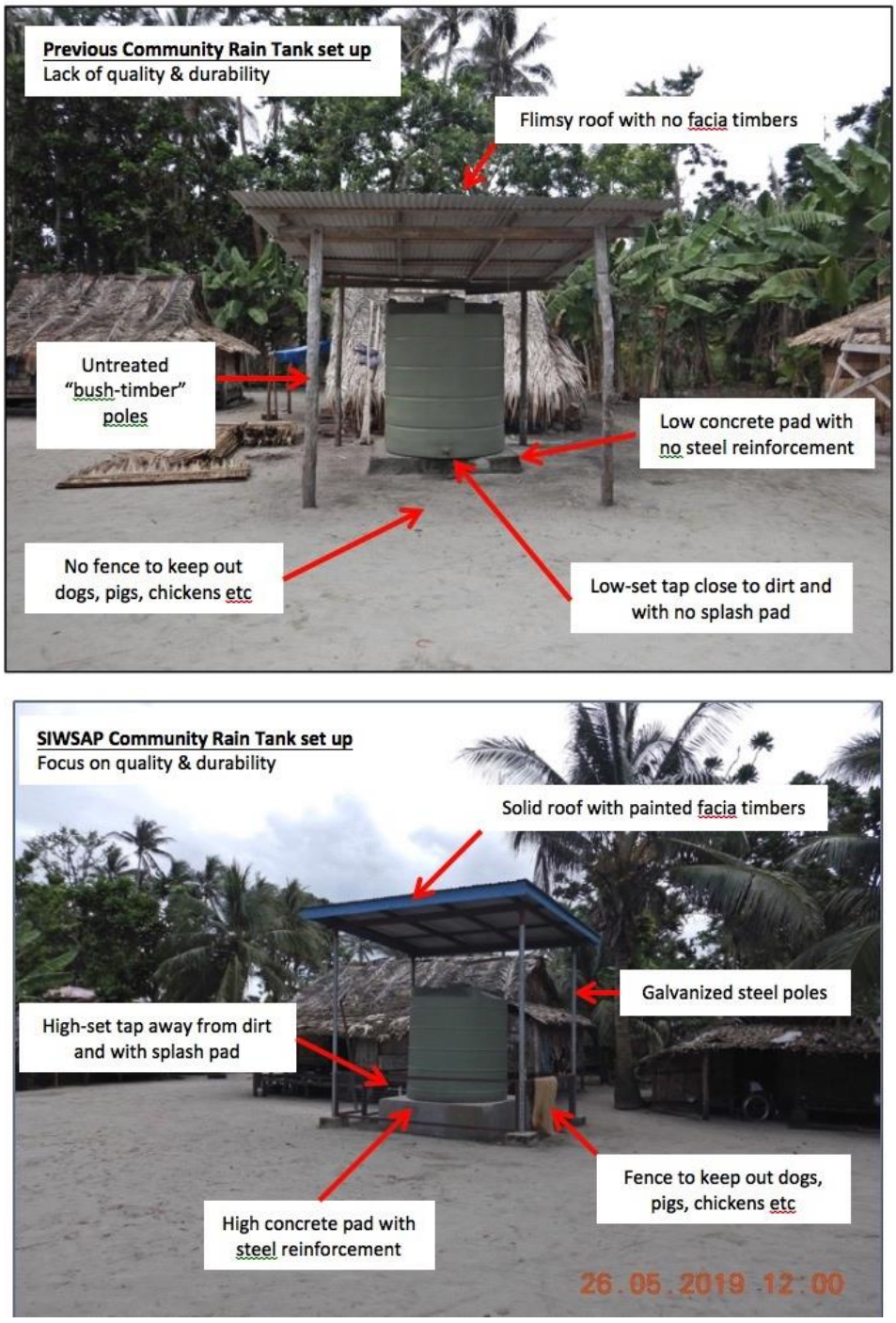


FIGURE 17: *An example of the effectiveness of SIWSAP (bottom), which had a much higher focus on quality and durability when building community infrastructure such as rain tanks – compared to previous (and often immediately adjacent) similar projects. Community members commented very favourably on this aspect of SIWSAP (images: Raaymakers)*

3.3.4 Efficiency

1. Overall it appears that the Project has been reasonably efficient, including:

    a) Co-opting all relevant government agencies through cross-sectoral, inter-ministerial arrangements.
    b) Strong utilization of community commitment and energy (although expecting too much without payment can back-fire later).

    c) At least at some sites, good integration with other related initiatives (Figure 18).

2. However, some significant in-efficiencies were noted, e.g.:

    a) Long delays (up to months) with UNDP recruitment and procurement processes.

    b) Repetitive, piece-meal contracting procedures to do similar work (vs Standing Panel arrangement from beginning of project).

    c) No preference given to using local contractors and labour (also social disruption issues when contractors came into communities from other areas).

    d) Co-financing may not have met original commitment (US$43.6 million) with a massive shortfall of $43.3 million.

3. Apart from Rennell Island where the bauxite mining company assisted with transporting and installing rainwater tanks, there was almost no engagement with private sector (private sector was only engaged as a supplier, not as a contributing partner).

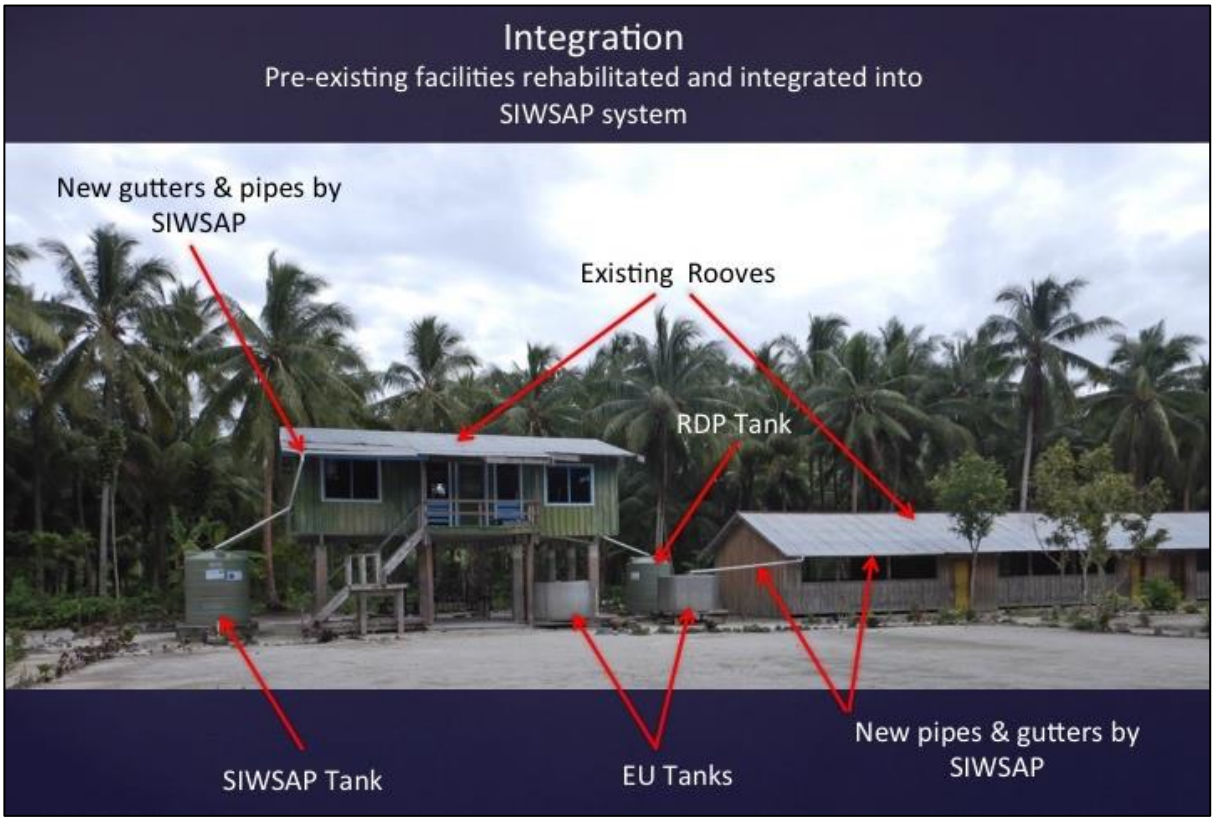


FIGURE 18: *The efficiency of SIWSAP was enhanced by integrating with existing structures and facilities from previous projects. For example in this image at the school on Aurigi (Santa Catalina) Island, all existing corrugated iron roofs were used as rain catchments, and pre-existing tanks installed by the EU and the Rural Development Programme (RDP) were rehabilitated and integrated into the SIWSAP rainwater system. This is a highly commendable approach, as often such projects simply ignore what has been done previously and duplicate (image: Raaymakers)*

3.3.5 Mainstreaming

1. UNDP supported GEF financed projects are key components in UNDP country programming, as well as regional and global programmes. The TE therefore assesses the extent to which the Project was successfully mainstreamed with other UNDP priorities, including poverty alleviation, improved governance, the prevention and recovery from natural disasters and gender. Each of these is considered as follows:

    a) Poverty alleviation: While the Project is not explicitly designed to address poverty alleviation, sanitation and water security and resilience to climate change are fundamental precursors to poverty alleviation. Improved water security in communities increases economic productivity as less time needs to be spent seeking and obtaining water. Improved water security in communities also allows diversification of economic livelihoods, including for some sites such as Aurigi (Santa Catalina), increased culture-based tourism. The Project has also contributed directly to poverty alleviation in the short-term but employing local contractors and labour in the communities.

    b) Improved governance: The Project has supported some improvements in governance relating to sanitation and water resources security and resilience, including by providing best-practice models, stimulating greater cooperation between various government ministries and divisions and stimulating national-level interactions, debate and discussion through the two National

Water Forums held in 2016, 2017 and 2018, which all stakeholders have hailed an highly successful and beneficial events, that should continue to be held (Figure 2). However, the Project's impact in improving water governance at the broader provincial and national levels, in terms of formalizing mandated governance arrangements, has not been as great as envisioned in the ProDoc.

c) Natural disasters: In addition to building water sector resilience to climate change, the Project has also built water sector resilience to natural disasters, including the 2015 El-Nino related prolonged drought, and the 2017 eruption of Tinakula Volcano in Temotu Province. During the eruption the SIWSAP groundwater desalination plant at Tuwo ensured water security for several neighbouring islands where water supplies had been contaminated by volcanic ash.

The Automatic Hydrometric Weather Stations installed by SIWSAP at all six pilot sites and handed over to the Meteorology Division of MECDM will also play an important role in disaster resilience, allowing real-time monitoring of groundwater status and early warning of impending water shortages. This will allow contingency plans to be implemented to ensure that communities have secure water supplies during low groundwater periods.

Additionally, given the extremely remote location of some of the project communities and lack of mobile phone and internet coverage, SIWSAP provided the National Disaster Management Office (NMDMO) of MECDM with six ManPac High Frequency (HF) radio systems, which have already proven useful in supporting disaster response communications.

It is likely that the facilities and systems installed by SIWSAP will play a similar resilience role in future disasters.

d) Gender: It appears that gender involvement in all SIWSAP activities has been well balanced and in fact has often been unbalanced towards greater involvement of females, including in the PMU. At the community level women and girls have benefited significantly by having secure water sources immediately adjacent to or much closer to their residences, reducing time and workload fetching water and also improving security. Women consulted during the TE expressed high satisfaction and appreciation for this outcome. Other social groups including the disabled have benefited from much more convenient access to secure water.

2. Overall, the TE assesses that the Project is well mainstreamed with other UNDP priorities. In addition, while not required by the TE ToR, an assessment of how the UN Sustainable Development Goals (SDGs) are relevant to and mainstreamed by the Project is presented below in Table 12. This finds that nearly all SDGs are relevant to highly relevant and have been effectively mainstreamed in the Project.

TABLE 12: *Relevance of SIWSAP to the UN Sustainable Development Goals (SDGs)*

SDG	Relevance of SIWSAP
 **1. NO POVERTY**	**Relevant:** • While the Project is not explicitly designed to address poverty alleviation, sanitation and water security and resilience to climate change are fundamental precursors to poverty alleviation. • Improved water security in communities increases economic productivity as less time needs to be spent seeking and obtaining water. • Improved water security in communities will also allow diversification of economic livelihoods, including for some sites such as Aurigi (Santa Catalina), increased culture-based tourism. • The Project has also contributed directly to poverty alleviation in the short-term but employing local contractors and labour in the communities.
 **2. ZERO HUNGER**	**Relevant:** As per SDG 1.
 **3. GOOD HEALTH & WELL BEING**	**Highly relevant:** • Good health and well-being are vitally dependent on access to clean, secure and resilient water supplies and good sanitation. • Some SIWSAP communities have reported a marked decrease in water-related diseases, especially amongst young children and the elderly, since project implementation.
 **4. QUALITY EDUCATION**	**Relevant:** • While the Project is not explicitly designed to address quality education, sanitation and water security and resilience to climate change are fundamental precursors to communities being able to provide quality education. • Improved water security in communities increases time that can be spent on educational activities as less time needs to be spent seeking and obtaining water. • The Project has given very high priority to improving water security and resilience at schools in all project communities. • The Project is also working with SINU to include improving water security and resilience in environmental management courses.
 **5. GENDER EQUALITY**	**Relevant:** • It appears that gender involvement in all SIWSAP activities has been well balanced and in fact has often been unbalanced towards greater involvement of females, including in the PMU. • At the community level women and girls have benefited significantly by having secure water sources immediately adjacent to or much closer to their residences, reducing time and workload fetching water and also improving security. Women consulted during the TE expressed high satisfaction and appreciation for this outcome. • Other social groups including the disabled have benefited from much more convenient access to secure water.
 **6. CLEAN WATER & SANITATION**	**Totally relevant:** • Self evident.

SDG	Relevance of SIWSAP
 **7. AFFORDABLE & CLEAN ENERGY**	**Relevant:** • The groundwater desalination/filtration plants and early warning systems installed by SIWSAP are all solar powered, demonstrating the utility and effectiveness of this form of clean and affordable energy.
 **8. DECENT WORK & ECONOMIC GROWTH**	**Relevant:** • As per SDG 1.
 **9. INDUSTRY, INNOVATION & INFRASTRUCTURE**	**Relevant:** Innovation and infrastructure are important tools for restoring, maintaining and protecting the ecological health of wetlands. However, careful assessment of potential impacts must be carried out to ensure that the application of innovation and infrastructure is ecologically appropriate and does not cause net negative impacts.
 **10. REDUCED INEQUALITIES**	**Relevant:** • As per SDGs 1 & 5.
 **11. SUSTAINABLE CITIES & COMMUNITIES**	**Highly relevant:** • Sanitation and water security and resilience to climate change are fundamental precursors to sustainable towns and communities.
 **12. RESPONSIBLE CONSUMPTION & PRODUCTION**	**Relevant:** As per SDG 6.
 **13. CLIMATE ACTION**	**Highly relevant:** • Climate change is one of the most significant environmental threats to the long-term sustainability of water resources in the Solomon Islands. • Addressing climate change impacts on water security is a primary objective of SIWSAP.
 **14. LIFE BELOW WATER**	**Partially relevant:** • Improved water security in communities increases economic productivity and allows development of alternative sustainable livelihoods, which may have indirect benefits for improved management of aquatic and marine biodiversity and living resources.
 **15. LIFE ON LAND**	**Partially relevant:** • Improved water security in communities increases economic productivity and allows development of alternative sustainable livelihoods, which may have indirect benefits for improved management of terrestrial biodiversity and living resources.

SDG	Relevance of SIWSAP
 **16. PEACE, JUSTICE & STRONG INSTITUTIONS**	**Partially relevant:** • Improved water security in communities increases economic productivity and allows development of alternative sustainable livelihoods, which may have indirect benefits in reducing the socio-economic stresses that cause peace and justice issues.
 **17. PARTNERSHIPS FOR THE GOALS**	**Relevant:** • The Project demonstrated the importance and benefits of close coordination and cooperation with relevant government ministries and agencies, and with other relevant programs and projects.

3.3.6 Sustainability

3.3.6.1 Financial sustainability

1. The TE team could find no evidence that National and Provincial Governments have committed sufficient financial resources to ensure ongoing, long-term (10-20 year) operation and maintenance of the facilities that have been installed at the 12 pilot and replica sites under SIWSAP.

3.3.6.2 Socio-political sustainability

1. Given the extremely high level of satisfaction with the Project that was expressed by all community stakeholders consulted during the TE, and the fundamental importance of water security and resilience, as well as sanitation, to all levels of society, it is likely that there will continue to be ongoing, strong socio-political support for sustaining the SIWSAP achievements – especially at the community level.

2. However, this is likely to be constrained by lack of financial and technical resources and support, especially given the highly technical nature of some of the equipment that has been installed (desalination plants etc).

3.3.6.3 Institutional & governance framework

1. The Project developed an Impact & Sustainability Plan as well as MoUs with National and Provincial Governments and the communities, which are designed to provide the institutional and governance framework for the long-term sustainability of the SIWSAP achievements.

2. However, while these are well intentioned and well-formulated on paper, there is often a disconnect between "paper and practice." It was reported that some Provincial Governments are objecting to signing on to the MoUs and have not been particularly supportive during the course for the Project, which does not bode well for sustainability after Project-closure.

3. Communities reported that they felt that the level of technical training provided in operation and maintenance of the desalination plants and other equipment was too narrow and not sufficient, and much more detailed and comprehensive training, including training of additional people to create redundancy, is needed. They also reported that there has been zero training in maintenance of some key components, such as the solar power plants that run the desalination plants.

4. *In order to enhance the prospects for long-term sustainability, is strongly recommended that the need for additional training be addressed before project closure.*

3.3.6.4 Environmental sustainability

1. Apart from unsustainable logging in water catchments, the main environmental threat to water security in the Solomon Islands is climate change.

2. Adapting to and building resilience against climate change is the primary objective of this Project, which has been well achieved at the 12 pilot and replica sites, thereby boding well for the environmental sustainability of the Project.

3.3.6.5 Overall assessment of sustainability

1. In order to build on the outstanding achievements and best-practice models established by SIWSAP in relation to community-level water security and climate change resilience, and to also address the lack of progress with some targets, it is strongly recommended that UNDP work with SIG to develop a Phase 2 project to facilitate up-scaling and Provincial and National level replication of Phase 1 successes.

2. The TE is concerned that without a Phase 2 project the prospects for sustainability will be diminished and the outstanding achievements and best-practice models established by SIWSAP will be lost.

FIGURE 19: *The TE team is concerned that given the highly technical nature of some of the equipment that has been installed (desalination plants etc), long term sustainability is likely to be constrained by lack of financial and technical resources and support. (images: Raaymakers)*

3.3.7 Impact

1. It is very clear that the Project has had a very significant impact in improving water security and resilience to climate change at the individual community level (12 pilot and replica sites).

2. The Project has not had any impact with regard to its sanitation targets and has had very little impact at the broader Provincial and National levels (which raises the vital need for a Phase 2 Project to facilitate up-scaling and Provincial and National level replication of Phase 1 successes).

4. OVERALL CONCLUSIONS

The overall conclusions of the TE of the SIWSAP Project are:

1. The project has been extremely effective at improving water security and resilience to climate change at both the six pilot sites and the six replica sites, through diversified water supply options, including (depending on the site) rainwater tanks, improved groundwater supply and new and/or rehabilitated wells, as well as early warning systems.

2. The Project has also built water sector resilience to natural disasters, including the 2015 El-Nino related prolonged drought, and the 2017 eruption of Tinakula Volcano in Temotu Province. It is likely that the facilities and systems installed by SIWSAP will play a similar resilience role in future disasters.

3. The level of satisfaction with the Project expressed by all community stakeholders consulted during the TE was extremely high. All stakeholders reported that the level of effectiveness of this Project is much higher than for similar related projects that they have been involved with.

4. The Project success has been very much dependent on very close consultation and coordination, and also hard work from the beneficiary communities, including through the Project Community Water Committees. ***The community engagement aspects of SIWSAP provide a best-practice model for other similar projects.***

5. The main area of under-achievement of SIWSAP was a general lack of progress with the project targets relating to sanitation. It was difficult for the TE team to establish the exact reasons for this lack of progress however the main contributing factors appear to be an over-ambitious workplan relative to Project budget and time-line, and the need for the PMU to prioritise efforts on water security and adaptation outcomes before focusing on sanitation, as well as cultural uptake barriers to some sanitation solutions

6. ***Overall, the TE team is of the view that ALL parties involved in SIWSAP deserve the highest commendation.***

7. However, despite the successes of the SIWSAP, financial management of the Project has not been of a satisfactory standard with many unexplained inconsistencies and anomalies in financial reporting, and an unexplained and unaccounted for overspend of circa US$623K in 2018. ***It is strongly recommended that at financial closure the Project should be subjected to a highly detailed, forensic financial audit by independent, external auditors, including tracing all expenditure trails for the whole Project period. The audit findings should be used to inform appropriate response actions, including funds recovery and punitive action should any wrongdoing be identified.***

ANNEX 1: EVALUATION QUESTIONS

These were emailed to most stakeholders in advance of consultation meetings and were used as a guide only. Stakeholder interviews were semi-structured and were allowed to flow freely depending on each stakeholder's role and interest in the Project.

Question	Response
1. Stakeholder (person or organization): (NOTE: Stakeholders will NOT be identified in the Evaluation Report and all inputs will be treated as 100% anonymous with full respect for confidentiality)	
2. Stakeholder's role / interest in the Project:	
3. Relevance *To what extent has the Project been relevant to your organization's or community's needs and priorities?:*	
4. Efficiency: *4.1 How well has the Project used available resources to produce intended results in terms of Quantity, Quality & Timeliness:*	
4.2 Has actual implementation achieved what was planned?:	
4.3 Do you have any comments on the organization, management and contractual arrangements for the Project?:	
4.4 Do you have any comments on coordination with all parties by the Project?:	
5. Effectiveness & Impact: *5.1 How far do you think the project's Objectives and Results have been achieved)?:*	
5.2 Who have been the main Project Beneficiaries?:	

Question	**Response**
5.3 Have there been any unforeseen Beneficiaries? Explain:	
5.4 Have there been any unforeseen Outcomes and consequences? Explain:	
5.5 Have the Project's underlying Assumptions been realized? Explain:	
5.6 Have the Project's resources including personnel been appropriate for Project? Explain:	
6. Sustainability: *6.1 What do you see as the prospects for ongoing sustainability of Project-related activities after the current GEF funding ends?:*	
6.2 What measures has the Project, SIG and partners put in place to ensure ongoing post-Project sustainability?	
6.3 What additional measures are still needed by the Project, SIG and partners in order to ensure ongoing post-Project sustainability?	
6.4 What is the level of "ownership" at both the local and national levels for Project activities and outcomes:?	
6.5 To what extent has the Project assisted in the development of sustainable policy, legal and institutional arrangements s?:	
6.6 Has the Project successfully built the capacity of SIG and Provincial Govts to manage water resources? Explain:	

Question	**Response**
7. Coherence: *7.1 Has the Project effectively complimented other relevant national policies, programs, projects and activities? Please explain:*	
7.2 Has there been any duplication? Please explain:	
8. Visibility: *Has the Project included effective Communication activities?:*	
9. Future Priorities: *What are the Key Areas that you think should be the focus for the next 5-10 years?:*	
10. Other Lessons Learned / Any other suggestions:	

ANNEX 2: STAKEHOLDERS CONSULTED DURING THE TE

No.	Name	Position	Organisation
1	Dr. Melchior Mataki	Permanent Secretary	Ministry of Environment, Climate Change, Disaster Management and Meteorology (MECDM)
2	Jonathan Tafiariki	Deputy Director of National Disaster Management Office	MECDM
3	Loti Yates	Director NDMO	MECDM
4	Dr. Christopher Vehe	Permanent Secretary	Ministry of Mines, Energy and Rural Electrification
5	Charles Bepapa	Director, Water Resource Division	MMERE
6	Ana Chernyshova	UNDP Country Manager (SI)	UNDP
7	Joy Papao	Project Manager	SIWSAP
8	Rodney Kauramo	Project Engineer	SIWSAP
9	Wendy Wara	Finance and Administration Officer	SIWSAP
10	Annie Miniti	Procurement Officer	UNDP
11	Joanne Aihunu	RSD Team Leader	UNDP
12	Aishath Azza	UNDP GEF Regional Technical Advisor	UNDP
13	Robin Ward	Former CTA	
14	Gloria Suluia	Former Project Manager	
15	Samuel Wara	Director of Aid Coordination	MDPAC
16	Mathew	Deputy Director, Aid Coordination	MDPAC
17	Leonard Olivera	Director Environmental Health Division, RWash Program	MHMS
18	Hudson Kauhiona	Director of Climate Change Division	MECDM
19	David Hiriasia	Director of SIMS, MECDM	MECDM
20	Aubrey Saueha	Provincial Project Officer, Renbel Province	SIWSAP
21	Tema Wickham	Provincial Project Officer, Western Province	SIWSAP
22	John Sele	Rwash Gizo,	MHMS
23	John Selwyn	Provincial Project Officer – Temotu Province	SIWSAP
24	Alfred Hulanga	Provincial Project Officer, Kirakira	Makira Province
25	Mostyn Natei	Chairman Tuwo Water Committee	Tuwo Water Committee, Temotu Province
26	Mandus Boselalu	Former Provincial Project Officer,	Choiseul Province
27	Jeffrey Pakipota	Provincial Secretary	Choiseul Province
28	Nelson Kere	Deputy Provincial Secretary	Choiseul Province
29	Jacob Zikuli	Team Leader, RDP	Choiseul Province
30	Ben Sanau	Chief Agriculture Officer	Choiseul Province
31	Lisi Volovana	Administration Officer, Choiseul Province Council of Women	Choiseul Province
32	Murray Rotoava	Principal, Choiseul Bay High School	Choiseul Province
33	Sem Vagae	Chairman, Poroporo Village Water Committee	Choiseul Province
34	Timothy Tukapongi	Committee member, Poroporo Village Water Committee	Choiseul Province
35	Ted Blessing	Santa Catalina Water Committee Chairman	Santa Catalina
36	Peter Waigugu	Chief – Santa Catalina	Santa Catalina
37	Nelly Wauki	ACW President	Santa Catalina
38	Catherine Loapo	MU President	Santa Catalina
39	Jessica Pero	Health Committee	Santa Catalina
40	Catherine Pupuni	Zone 6 rep.	Santa Catalina
41	Ethel Kapuro	Zone 6 rep	"
42	Dorothy Nate	Zone 6 rep	"

No.	Name	Position	Organisation
43	Ken Rongo	Zone 6 rep	"
44	Midlyn Rongo	Zone 6 rep	Santa Catalina
45	Mark Wasuka	Zone 6 rep	"
46	Moses Pio	Zone 6 rep	"
47	Tony Hea	Zone 6 rep	"
48	Patty Mena	Zone 2 rep	Santa Catalina
49	Jonah Kurio	Zone 2 rep	"
50	Aven Masui	Zone 2 rep	"
51	Cyrine Karinigikero	Zone 2 rep	"
55	Marlon Tai	Zone 2 rep	Santa Catalina
56	Ben Wauki	Zone 2 rep	"
57	Cony Karito	Zone 2 rep	"
58	Silas Feruna	Zone 2 rep	"
59	Elliot Kiakio	Zone 2 rep	"
60	Martin Rigufa	Zone 1 rep	Santa Catalina
61	Emily Wauki	Zone 1 rep	"
62	Kins Keusia	Zone 1 rep	"
63	Warren Faununu	Zone 1 rep	"
64	Sydney Manu	Zone 1 rep	"
65	Bonfish Faga	Zone 1 rep	Santa Catalina
66	Barth Mamua	Zone 1 rep	"
67	Kate Waigugu	Zone 3 rep	"
68	Ester Kafere	Zone 3 rep	"
68	Rex Taki	Zone 3 rep	"
70	Pamela Kiokio	Zone 7 rep	Santa Catalina
71	Grace Pariri	Zone 7 rep	"
72	Frank Suna	Zone 7 rep	Santa Catalina
73	Alice Taki	Zone 7 rep	"
74	Jenny Waetara	Zone 7 rep	"
75	Caroline Rura	Zone 6 rep	Santa Catalina
76	Mark Wasu	Zone 6 rep	"
77	Victoria Wasuka	Zone 6 rep	"
78	Kate Siofi	Zone 6 rep	"
79	Joyceline Sau	Zone 6 rep	Santa Catalina
80	Willie Taone	Zone 6 rep	"

ANNEX 3: TE COUNTRY MISSION SCHEDULE

Activity	May 2019																			June 2019							
	M 13	T 14	W 15	T 16	F 17	S 18	S 19	M 20	T 21	W 22	T 23	F 24	S 25	S 26	M 27	T 28	W 29	T 30	F 31	S 1	S 2	M 3	T 4	W 5	T 6	F 7
1. Desk Review & prepare IR:																										
2. Submit IR:																										
3. Desk review & mission planning:																										
4. TL fly CNS to BNE (o'night BNE):									1635 1845																	
5. TL fly BNE to HIR:										1000 1415																
6. Project Briefing (o'night HIR):										HIR																
7. Meetings HIR (o'night HIR):											HIR															
8. Meetings HIR (o'night HIR):												HIR														
9. ET fly HIR to Santa Anna (SANA):													1000 1120													
10. ET boat to St Catalina (STC):													STC													
11. Meetings STC (o'night STC):													STC													
12. Rest Day (o'night STC):														STC												
13. Meetings STC:															STC											
14. ET boat to SANA (o'night SANA):															SANA											
15. ET fly SANA to HIR:																0735 0935										
16. ET fly HIR to CHY (TARO):																1230 1500										
17. Meetings TARO (o'night TARO):																TARO										
18. Meetings TARO (o'night TARO):																	TARO									
19. ET fly CHY to HIR (o'night HIR):																		0810 1040								
20. Prepare Prelim. Report (o'night HIR):																		HIR								
21. Present Prelim. Report (o'night HIR):																			HIR							
22. TL fly HIR - BNE - CNS:																				1545 2130						
23. Prepare & submit DER:																										
24. Prepare & submit FER:																									*FER	

Consultants' Home
Country Mission

IR = Inception Report
TL = Team Leader
ET = Evaluation Team
CNS = Cairns
BNE = Brisbane (1 night)
HIR = Honiara (6 nights)
SANA = Santa Anna (1 night)
STC = Santa Catalina (2 nights)
CHY = Choiseul (2 nights)
DER = Draft Evaluation Report
FER = Final Evaluation Report
*Dependent on UNDP review

ANNEX 4: LIST OF DOCUMENTS REVIEWED

- Government of Solomon Islands: Aid Management and Development Cooperation Policy. Ministry of Development Planning and Aid Coordination, Honiara, Solomon Islands, 2016.
- Government of Solomon Islands: National Development Strategy 2016-2035.
- Government of Solomon Islands: National Development Strategy 2011-2020.
- Ministry of Environment, Conservation and Meteorology, Solomon Islands National Adaptation Programme of Action, Nov 2008.
- MMERE, MECDM, MHMS, MDPAC and UNDP, Concept Note for the 2017 National Water Forum on November 22-23, 2017.
- Solomon Islands National and Sanitation Sector Plan 2013. Ministry of Mines, Energy and Rural Electrification.
- SIWSAP Project Document (ProDoc).
- SIWSAP Project Inception Report.
- Implementing/executing partner arrangements.
- Midterm Evaluation (MTE) Report.
- Annual Project Implementation Reports (PIR).
- Annual Progress Reports (APRs).
- ESSI Grant Agreement.
- Quarterly Progress Reports (QPR).
- Project budget, broken out by outcomes and outputs.
- Financial Data including Combined Delivery Reports (CDR).
- Comprehensive report of subcontracts and consultancies.
- Technical reports and similar outputs produced by the Project.
- Sample of project communications materials, i.e. press releases, brochures, documentaries, etc.
- SIWSAP Annual Progress Report 2018
- SIWSAP WASH Baseline Report, Tuwo Village, Temotu Province, April 2016.
- SIWSAP WASH Baseline Report, Taro Town, Choiseul Province, April 2016.
- SIWSAP WASH Baseline Report, Tigoa Town, Renbel Province, April 2016.
- SIWSAP WASH Baseline Report, Ferafalu Village, Malaita Province, April 2016.
- SIWSAP Project Implementation Review (PIR), 2017.
- SIWSAP Project Implementation Review (PIR), 2018.
- SIWSAP Project Implementation Review (PIR), May, 2019.
- SIWSAP Annual Report 2016.
- SIWSAP Annual Report 2017.
- SIWSAP Annual Report 2018.
- SIWSAP Procurement Detailed Report 2015-2019.
- SIWSAP National Water and Climate Change Forum 2018 – Forum Report (Executive Summary), Honiara, Solomon Islands.
- SIWSAP National Water and Climate Change Forum 2018 – Forum Report, Honiara, Solomon Islands.
- SIWSAP El Nino Preparation Plan.
- Prompt for SIWSAP document.
- Report on National Water and Climate Change Forum 2018, Heritage Park Hotel, Honiara, Solomon Islands from 28th-29th Nov 2018.

ANNEX 5: CONSULTANT CODE OF CONDUCT FORMS

ANNEX 5A: TE Consultant Code of Conduct Agreement Form - Raaymakers

Evaluators:

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

Evaluation Consultant Agreement Form[1]

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

Name of Consultant: Steve Raaymakers

Name of Consultancy Organization (where relevant)**:** EcoStrategic Consultants

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

Signed at *Cairns, Australia* on *10 May 2019*

Signature: 

[1]www.unevaluation.org/unegcodeofconduct

ANNEX 5B: TE Consultant Code of Conduct Agreement Form - Parairato

Evaluators:

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

Evaluation Consultant Agreement Form[2]

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

Name of Consultant: William Parairato

Name of Consultancy Organization (where relevant)**:** Frontier Consulting Solomons

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

Signed at *Honiara* on *13th May 2019*

Signature: 

[2]www.unevaluation.org/unegcodeofconduct

ANNEX 6: GCF CONCEPT NOTE TEMPLATE

Provided as separate document