



Page 1 of 15

**Solomon Islands Water Sector Adaption Project
(SIWSAP)
Quarterly Report**

Country: **SOLOMON ISLANDS**

Period Covered: **April – June 2016**

Prepared by: Gloria Suluia (Project Manager)

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Section 1: Summary of Overall Project Progress

SIWSAP has made marked progress in the second quarter with the following key achievements; i) implementation of the Adaptation Planning Phase in 5 of the six pilot sites, ii) completion of the project's budget revision for 2016, iii) completion of quick fixes in five out of the six pilot sites, iv) finalization of contract with Engineering Environmental Services Ltd (EESL) to implement quick fix activities in Tigoa; v) engagement of TRUNZ for the procurement, training and installation of water desalination/filtration equipment, vi) finalization of SIWSAP's slogan and logo, vi) engagement of Novus to develop SIWSAP's website, and vi) the finalization of Climate Change Vulnerability Assessments Reports for the six pilot sites. Other activities involved ongoing negotiation with NIWA for the procurement of Automatic Hydro-meteorological Stations and preparation for the National Feedback Session proposed for August 2016.

Besides these achievements, a few challenges were encountered namely; delays in the rolling out of the Adaptation Planning Phase due to the operational closure of Solomon Airlines on 7th and 8th June 2016 which resulted in a big back log; slow turn overs in the procurement of Early Warning Systems and Ground water assessment equipment; quality of work by Zenith Environmental and Engineering Ltd in the implementation of quick fix activities in Tuwo and Gizo; lack of SIWSAP presence in Taro due to the Provincial Officer concerned been medically evacuated. Implementation during this reporting period covered a good number of activities across all four outcomes. Overall, delivery against the annual target of **USD2,531,000** for this quarter alone stands at **USD505,277.06**.

Outcome 1: Formulating, integrating, and mainstreaming water sector-climate change adaptation response plans in the water-related sectors as well as broader policy and development frameworks.

- A Monitoring & Evaluation Plan has been developed for SIWSAP incorporating UNDP results based framework and key indicators to assess the management of water sheds and water resources across pilot sites. Dependent on resources, it is hoped to include a number of control sites to compare results against;
- Completion of the CCVA process and the transition phase from identifying vulnerabilities to discussing adaptation planning – keeping in mind the importance of both hardware (infrastructure) and software (policies, awareness and organization). This balance is crucial to an effective Climate change vulnerability and adaptation process. The CCVA is a fundamental achievement to the overall SIWSAP process. Key findings and recommendations from the CCVAs were utilized to guide the adaptation planning phase and the development of specific pilot site Water Sector – Climate Change Adaptation Response Plans (WS-CCARP).
- Currently the project is rolling out the Adaptations Planning Process and have completed 5 out of the 6 pilot sites. This process entails strategizing of adaptation projects completed in 5 pilot sites and envisaged to be completed by mid-July 2016. In tandem, the CCVA team is developing the WS-CCARPs for sites already been completed. The WS-CCARPs are crucial documents for the



Page 3 of 15

governments, communities and development partners as they will highlight adaptation planning and response needs across all pilot sites. The six WS-CCARPs are envisaged to be completed by August 2016 and implementation will soon follow after.

- The project has also completed a survey on RWASH in all pilot sites. The PMU is awaiting the consolidated results of this survey from the Provincial Officers.
- A Baseline Assessment Report on the Integration of Gender in Water Resources and Climate Change in the six pilot sites have also been completed. Find below is a brief summary of the preliminary findings:
 - In Tigoa, women have difficulties physically accessing water because the natural wells in caves (main source of water in this pilot site) are located far from the township in the forest where some of the paths are very steep. This increases women and girls vulnerabilities as they are exposed to high risk of falling if one loses balance. There are also a few cases where pregnant women have had miscarriages while fetching water from these water sources. It was further identified that women lack ownership of land due to the patrilineal system practiced on the island. However, women in male-headed households do have the opportunity to use the land for growing vegetables for family consumption. Female headed households lack access to such an opportunity with limited social and economic assets to draw from during climate change and water stressed periods. When water is scarce, women's physical and mental burden increases, and girls education is often compromised. Girls often skip classes in order to help their mothers fetch water. This hampers their studies as they can hardly catch up with their classes when they return to schools. Boys and husbands also provide help but only in times of severe water scarcity.
 - For Ferafalu, women often face hardships in performing their care-giving and household work when there is inadequate supply of water and poor sanitation facilities. Women mostly rely on communal water sources that requires about one and half hour walk. Migration of young males to Honiara for education and employment has left women to care for children and the elderly, which further increased women's burden with limited livelihood options. Women and girls mainly face challenges in physically accessing fresh and clean water as well as information and health services since government offices and health centers are not easily accessible. Women reported that illness such as red eye and diarrhea are common among children particularly during disasters such as tropical



Page 4 of 15

cyclones and flooding. Women/girls often end up bathing and cleaning themselves in the sea during menstruation when water is scarce. Young women also have less options for negotiations and decision making compared to elderly women who through the years have raised their status in the household thus are able to negotiate in any decision making processes. In Ferafalu, mother-in-law are major decision makers in household water usages.

- Few men in Tuwo acquire skills to repair water infrastructures. However, due to the isolation of this pilot sites, there is limited access to materials in the village and less opportunity to earn cash, thus men's capacity to fix broken water infrastructures are limited. Women, particularly single mothers with limited skills, no access to materials, and money encountered more challenges in maintaining water infrastructures. Women in Tuwo carry the burden of household work and this is further exacerbated by the migration of able-bodied men to Honiara in search of employment. It is obvious that climate change impacts contributing directly to water insecurity has increased women's vulnerability. Limited access to quality fresh water and low levels of awareness on proper sanitation affects women the most who are responsible not only for fetching water but also for cleaning and maintaining proper hygiene and sanitation. There is a common consensus among women and men that most men are "lazy" to support women in household work including water collection. Some women also reported that a few women face domestic violence when they are unable to fulfill their household duties due to longer time spent on water collection especially during water stressed periods.
- Gender roles in Santa Catalina are fixed for men and women. While women perform the roles of housewives, doing household chores and looking after children; males perform the roles of household head providing economic necessities such as food, clothing, school fees etc. Women, the elderly and children in Santa Catalina are mostly affected by the impacts of climate change on water resources. Since women are the primary water collectors, it becomes difficult for them to access clean water when water sources deplete during drought periods. At such times, children are often used as helping hands to fetch water. The elderly who are living alone face a lot of challenges in physically accessing water from hand dug wells (no pumps) as well as from communal tanks as they have to walk a few metres from their homes. Women's mobility and



Page 5 of 15

interaction within and outside the community is limited. Women are mostly unpaid householder workers with less access to information on climate change, sanitation, hygiene and water. They also lack enough income and savings. Community power structure is such where women hold limited decision making power over land and other assets such as water and sanitation.

- With the increasing urban growth and limited availability of water resources, women in Gizo Township face challenges in their care-giving role. While livelihood opportunities are diverse for women as well as men in Gizo, there are more men in senior post attracting higher salaries/wages compared to women. A good number of women are earning an income by taking up remunerative jobs such as teaching, micro-enterprise, nursing, and other government employment, however, they are also equally responsible for completing household chores such as fetching and providing water for their families. As the principle collectors and users of water for various household purposes, women often face severe difficulties in accessing good quality water during drought periods. Unlike other sites, Gizo in terms of population and size is far bigger hence women often spent hours commuting to the nearest water sources to fetch water and in most cases during odd hours. This creates additional responsibility and burden to most women. Children, the elderly and people living with special needs whose mobility is often limited, also lack access to proper sanitation and water facilities. While women provide care-giving services for such groups, this becomes a real challenge during severe drought conditions. Due to the long standing water issue in Gizo, women have practice water conservation methods such as using waste water from washing kitchen utensils and reusing them for toilets etc.
- Limited supply of good quality water means increase burden for women and men in Taro township. Women in Taro perform both unpaid household/care-giving roles and paid jobs. When water is contaminated and clean water becomes scarce, women's responsibilities multiply. Limited access to fresh and clean water further affects household members who are responsible for its collection. Although women in Taro regularly receive help from men to collect water, they remain the primary source of water collectors. When climate change impacts such as droughts affect Taro residences' main source of water (water tanks), women spent most of their time looking for alternative water sources in the nearby mainland of Choiseul Bay. Similarly, menstruating women/girls, pregnant and lactating



Page 6 of 15

mothers' health are comprised when water becomes scarce. Women in Taro also hold some level of adaptive capacity. Women play important role in disseminating information to family members during water emergencies. Participants from one of the Taro focus group discussion said that, it is mainly mothers or women who are more aware about water than their male counterparts and they normally activate water management practices in homes. At household level, men and women both share responsibilities when it comes to water collection, however, women uses more water because most of the household chores are done by women – for example women are responsible for cooking, washing, laundry, bathing children etc.

- Overall, based on the Gender assessments, climate change hazards such as droughts, tropical cyclones, salt water intrusion, flooding etc are directly and indirectly affecting water resources in the six pilot sites. An increase in socio-economic distresses is leading to loss of biodiversity and ultimately threatening the livelihoods of men, women and other groups who have limited knowledge and capacity to adapt to climate change. Problems such as depletion of water resources, fresh water shortage and water contamination have affected the livelihoods of men and women in different ways, and adversely contributes to further burden women who already has a lot of responsibilities in their communities and households.

Outcome 2: Increasing the reliability and improving the quality of water supply in targeted areas.

- SIWSAP have trialed community rainwater tank level gauges in Santa Catalina as an improved local management tool with possibilities of scaling-up in other pilot sites;
- Procurement of important water quality testing and monitoring equipment; installation of a rainwater gauge in Santa Catalina pilot site and daily measurements recorded by a designated community member (bottom-up EWS);
- Ongoing negotiations with NIWA for the procurement of Automatic Hydro-meteorological Stations (top-down EWS - deployment of the Automatic Hydro-Meteorological Stations (AHSs) and ground water assessment equipment. Procurement colleagues are compiling the last set of documentation prior to submitting the case to RACP. This procurement is still work in progress since late 2015;
- Finalization of a contract with Environmental Engineering Services Ltd, a private firm for the construction of quick fix activities in Tigoa;
- Rehabilitated a well in Taro and the piped water supply system in Tigoa Township which is nearing completion.



Page 7 of 15

- Negotiations well underway with a local NGO (Ecological Solutions) in Gizo and in Taro (Lauru Land Conference of Tribal Chiefs in partnership with The Nature Conservancy) to carry out various awareness programs on behalf of the project through the Grant Agreement mechanisms. These NGOs have been identified as having the necessary assets at the provincial level that the project requires. Initial awareness identified and discussed with the NGOs included but not limited to; water management regulations, protection of existing water sources, waste management, climate change impacts on water resources, and sanitation (discourage open defecation and alert people on the common WASH diseases, as well as the need to adopt appropriate sanitation technology to protect ground water).
- SIWSAP exploring potential partnership for compost toilets and has scheduled a “Look and Learn” visit with ADRA in the third quarter of 2016 to two Guadalcanal communities where ADRA has successfully introduced compost toilets. This visit is crucial as it will determine whether there is local capacity for outsourcing such activity. Sanitation campaigns have also been facilitated with the Sanitation team of EHD for roll out in the 3rd and 4th quarter of 2016.
- For ground water assessment, consultation has been made during this reporting period with SOPAC (CROP agency) on the possibilities of engaging their technical team (as well as their equipment) to undertake ground water assessment in specific pilot sites (e.g Gizo, Taro etc).

Outcome 3: Investing in cost-effective and adaptive water management interventions and technology transfer.

- Through a competitive process, TRUNZ (a Switzerland company) was awarded the contract for the procurement of specialized disaster relief equipment (desalination and water treatment systems), inclusive of installation and training. These equipment will address the lack of water security equipment at the provincial and community level. A training component of national, provincial and community members was embedded in this procurement to ensure effective management, maintenance and support mechanisms during and beyond the life of the project;
- Close to finalizing the recruitment of the Communication Specialist to develop SWISAP’s Communication Strategy;
- Ongoing collection and documentation of lessons learned and best practices in the six pilot sites by the Provincial Officers with support from the Technical Officer Communication and Community Engagement.
- Quick fix activities are ongoing in some of the pilot sites. Reflected in the table below is the status of quick fix activities in the remaining sites:



Page 8 of 15

Project sites	Current status (%)	Ongoing tasks	Responsibility
Tuwo	95	<p>All quick fix activities almost completed.</p> <ul style="list-style-type: none"> • Additional improvement work included: tank basement and tank post footings. • Provincial Officer (PO) responsible working on finalizing material list for procurement. 	PO, PMU
Ferafalu	95	<p>Quick fix activities almost completed.</p> <p>Outstanding improvement work included:</p> <ul style="list-style-type: none"> • Provide fencing for water tanks, and metal strapping for posts. <p>Project Management Unit (PMU) currently working on purchase order of materials by a local supplier in Auki.</p> <p>Provincial Officer working on necessary arrangement for labour as well as to transport materials from Auki to Ferafalu.</p>	PO, PMU
Tigoa	75	<ul style="list-style-type: none"> • Quick Fix activities progressing well. The majority of water tanks have been installed. • Downpipes yet to be installed as contractor is in town to procure the required fittings. • Reticulation system for Tigoa awaits additional materials from Honiara. Once all materials are on site, remaining work should be completed. 	PO, PMU
Gizo	80	<p>Quick fix as per contract with Zennith has been completed.</p> <ul style="list-style-type: none"> • Additional improvement work included; <ul style="list-style-type: none"> - Complete guttering for Netball court - Down pipes for water tank at the Women Resource Centre. - Improvement work to rehabilitate an existing hand dug well; • List of materials have been finalized and send to suppliers in Gizo and Honiara (some materials required are not available in Gizo) • Provincial Officer and UNDP Procurement to decide on contractor to complete outstanding work. 	<ul style="list-style-type: none"> • PO,PMU



		<ul style="list-style-type: none"> In complete portion of work was mainly due to challenges encountered (shortfall) with materials to be procured by the provincial government. 	
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Outcome 4: Improving governance and knowledge management for climate change adaptation in the water sector at the local and national levels.

- Representation by the Deputy Director, Water Resources Division, (Mr Isaac Lekelalu) and the SIWSAP Project Manager (Ms Gloria Suluia) at the International Water Centre WASH Futures Conference in Brisbane from 16-20 May 2016. The objective of attending the conference/training was to learn about how all WASH actors - governments, private sector and civil society can work together to ensure WASH, whether at community scales or large institutional scales can contribute to achieve sustained access not only for everyone but also health, well-being, environmental and economic outcomes for societies. Also it was important for the government and the project to draw on lessons learned and how this can be used to the advantage of implementing SIWSAP activities. The team was able to develop much needed network with key WASH partners in the Pacific region in preparation for the National Water and Adaptation Forum proposed for 2017 under the SIWSAP. The conference/training attracted practitioners and professionals from civil society, governments, the private sector, donors, students and academic institutions to come together to contribute to the broader international WASH dialogue and share knowledge with the WASH community and partners. The conference comprised five days of activities with two days dedicated to conference-style sessions with parallel streams addressing specific themes, and three days of training workshops relating to the theme of the conference ‘WASH Futures: Pathways to universal and sustained water, sanitation and hygiene.
- Successful engagement of a privately owned company known as Novus to develop SIWSAP’s new website. Proposed work will commence in late July 2016 for approximately two months. The completion of this website will ensure the visibility of SIWSAP’s work locally and internationally;
- Finalization of SIWSAP’s logo and slogan by a local artist in close collaboration with key partners. This process took almost 4 months but this was necessary in ensuring that expectations of key government partners are met;
- Solomon Star newspaper featured an article on SIWSAP (9/7/16), briefly describing the purpose of the project;
- A contract has also been entered with Akvo, an international NGO. AKVO is a tablet based tool that capture surveys data. Akvo builds on open source internet and mobile software which is used to make international development cooperation and aid activity more effective and transparent. SIWSAP will



Page 10 of 15

utilize this tool as a project tracking mechanism for its staff across the 6 pilot sites. This will provide a live project register in a timeline feed. Provincial Officers (POs), the Project Management Unit and key government partners will use this tool to upload photos, movies, and data to the project feed. This will allow the team to see the progress and results of POs in the field and for the team to learn, share and cross-pollinate learning as the project progresses. AkvoFlow will also be used for customizable data collection through surveys and questionnaires (throughout project life-cycle), mapping of WASH infrastructure and live status (and ongoing data logged information), water quality monitoring (either manual or GPS auto-logged), and tracking of key climate change impacts over time.

- In partnership with CHICHAP, a “look n Learn” program on compost toilets is planned for Vanuatu before end of 2016.
- National level advocacy is planned for Q3 2016 with SIWSAP and partners to host a National Climate Change WASH Adaptation planning workshop for all key WASH stakeholders (including Government and NGOs). The objective will be to present the CC-VA and WS-CCA methodology, share lessons learnt and propose a National WASH Safety Plan approach for policy endorsement.
- SIWSAP successfully participated in the World Environment Day through dissemination of information regarding the project as well as supporting the Ministry of Environment, Climate Change, Disaster Management and Meteorology with venue hire for the occasion;

Outcome 5: Project Management

- The project completed its budget revision in June 2016. This exercise was necessary to move the budget within and across the outcomes without affecting the entire total budget which still stands at USD2,531,000.
- A draft Terms of Reference was developed and shared with key partners for the recruitment of a Project Management Specialist. This person will greatly assist the Project Management Unit, particularly the Project Manager in progressing and preparing for upcoming key events such as the National Feedback Session and the rolling out of the Water Sector-Climate Change Adaptation Response Plans.
- A draft Terms of Reference is also under development for the post of Climate Change/Disaster Risk Reduction/Early Warning System, an established post under the project. As soon as the TOR is finalise, this will be shared with key government partners for their review prior to advertising.
- SIWSAP’s Provincial Officer for Taro was evacuated on medical grounds to Honiara during this reporting period. This has affected the implementation of activities on the ground in Taro. SIWSAP has put in place interim measures by supporting activities in Taro from Honiara and where necessary will deploy the Water Sector Adaptation Officer on site.



Section 2: Project progress tracking sheet

The project implementation schedule as per project document is on track.

Section 3A: Project Risks and Issues

3A: Project Risks Matrix

Existing risks/threats identified PRIOR to this quarter

Risk	Level	Mitigation measures	Responsibility
Weather impedes travel to Provinces, in some cases for months. Health and safety concerns with outer islands and drought weather/boat rides. Extreme natural events.	Medium	Avoiding travel during times of the year when the weather is known to be changeable and rough seas. Procurement of safety kits for boat travel containing lifejackets, satellite phones, and other emergency equipment.	PMU, MMERE, EHD, MECDM, Provincial Governments



3B: Project Issues

Issue	Potential impact on the project, how dealt with and the result.
<p>Major slippages in the procurement of ground water survey equipment and Automatic Hydro-meteorological Stations and Rain Gauges.</p>	<p>SIWSAP is unable to pilot/trigger water conservation measures due to the unavailable of data/information on projected dry spell (droughts). Potentially, this makes pilot communities/townships more exposed and vulnerable as it is highly likely that they will be caught off guard by future droughts. The PMU is working closely with the UNDP Sub-Office colleagues to try and move this procurement forward. This procurement has been outstanding since late 2015.</p>
<p>Strained relationship between SIWSAP and the National Public and Health Laboratory (NPHL) who undertook water quality testing (microbiological test) of wells in Taro for E.Coli and Coliform.</p> <p>The lab was unhappy regarding delays by the project to respond to e-mails on proposed next steps for water quality testing in the remaining 5 sites. This was further exacerbated by delays of the results of samples taken.</p> <p>The delay in response was mainly due to a few factors which requires PMU's action namely: inclusion of tests not requested by SIWSAP (the project only requested for E.Coli and Coliform test as other test had been carried out by the WRD; why test carried out for Taro hospital were included in the SIWSAP bill); the need to ascertain the high cost of test done (SBD33,000) for 20 wells; and queries regarding inconsistency in information provided for in the vendor form by the lab.</p>	<p>Since this is the only Public lab in Solomon islands who does such tests and is recognized in terms of the quality of tests done, similar tests anticipated for the remaining 5 pilot sites cannot be carried out. SIWSAP is currently trying to resolve this matter through support from key partners like WRD and the Environment Health Division. If attempts to resolve the matter fails, then SIWSAP can resort to utilize service providers such as Solomon Waters and the University of the South Pacific etc which can provide similar tests but at a much lower cost. Alternatively, SIWSAP is exploring the option of procuring its own equipment/kit to test for E.Coli and Coliform.</p> <p>This issue has now been resolved with the lab. The project had also managed to successfully utilize the services of Solomon Waters to carry out its water quality test at a much lower price.</p>



<p>In the process of resolving these issues, the PMU received an e-mail from the lab noting that SIWSAP has caused so much embarrassment due to the delayed response and that the lab will not be subjected to any future work with SIWSAP/UNDP nor engage any of its staff.</p>	
<p>SIWSAP encountered some challenges with Zennith Environmental and Engineering Ltd, a local company during this reporting period in the construction of quick fix activities in Tuwo. Additional 5 rain water tanks with standalone catchment were requested by the Tuwo Water Committee after the contract was issued. Zennith was approached to provide a quotation on the additional work but the total amount exceeded the initial contract amount which warrants a new competitive process. While in the process of assessing Zennith’s submission, the company proceeded with the procurement of additional materials without prior approval by UNDP. As a result, Zennith expressed grievances that they were at loss due to the additional work which UNDP failed to accommodate for. They also claimed that UNDP did give them the green light to move ahead with the additional work something that UNDP denied.</p> <p>As a result, there is no provision under the current contract to pay for the additional work carried out by the contractor.</p>	<p>Local casual labourers in Tuwo recruited by Zennith have threatened to damage water infrastructures due to non-payment of their wages. Since this arrangement was made by the contractor, the project together with the Procurement and Environment Portfolio team at the UNDP Pacific Solomon Islands office met with Zennith to try and resolve the matter. As a comprise, Zennith agreed to deal with the casual labourers grievances while UNDP will investigate the issue at hand, particularly to ascertain Zennith’s claim that UNDP did give them the approval to move ahead with the additional work.</p> <p>If all attempts to resolve this issue in Tuwo failed to eventuate, the project will deduct the total amount owed by Zennith to pay for the casual labourer’s from Zennith’s outstanding payment for Gizo quick fix activities. UNDP is yet to pay Zennith for construction works in Gizo.</p>

Section 4: Lessons Learnt (difficulties occurred and solutions found) and Good Practices (for knowledge sharing purposes)

- The successful engagement of the private sector and local communities in Rennell through support from the Provincial Government had saved the project quite a substantial amount of money. Due to the remoteness of this pilot site, basic infrastructures such as wharfs, heavy vehicles (dump trucks) and machineries (e.g excavator) are non-existent on the island. Through successful negotiations between the provincial government with the logging and mining companies, World Trade Link (a mining company) successfully responded and offered 3 dump trucks and an excavator at no cost to the project to transport the quick fix materials from the wharf to Tigoa (about 20 kilometers in distance) and to lift heavy materials from the landing craft to the dump trucks. Additionally, a local family in Rennell offered their wharf for the landing craft to



Page 14 of 15

berth and offload all quick fix materials without any charge. The project is indebted to the Provincial Government for its tremendous support as without this, it would not be impossible to implement quick fix activities in Tigoa. The project will continue to nurture this new partnership and hope to replicate this in other sites, particularly in Gizo and Taro.

Section 5: Additional information

SIWSAP's Second Quarterly Newsletter for 2016 *(prepared by the SIWSAP Technical Communication and Community Engagement Officer, Ms Ruth Ramoifuala) will soon be finalized for distribution.*

