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### **Terms of Reference**

**Consultancy Title:** Hydrogeologist Expert (international)

**Project Name:** Solomon Islands Water Sector Adaptation Project (SIWSAP)

**Duty Station:** SIWSAP Office (Water Resources Division, Honiara, with travels to all pilot sites)

**Duration of the Contract:**

- Contract period: 3<sup>rd</sup> April to 3<sup>rd</sup> August, 2017 (full time)
- Period: 89 days over 4 months
- Days: 89 days (excluding weekends, public holidays)
- Tentative Start Date: 3<sup>rd</sup> April 2017
- Contract End Date: 3<sup>rd</sup> August 2017

**Objectives:** This position aims to lead, facilitate and provide technical support for the hydrogeological survey/ groundwater assessments across SIWSAP's 6 pilot sites.

### **Background**

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 salt water 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.

In this context, Government of the Solomon Islands, Ministries of Mines, Energy, and Rural Electrification (MMERE), in partnership with Ministry of Environment, Climate Change, Disaster Management and Meteorology (MECDM), Ministry of Health and Medical Services (MHMS) – Environmental Health Division, Ministry of Development, Planning, and Aid Coordination (MDPAC), and UNDP is embarking on the Solomon Islands Water Sector Adaptation Project (SIWSAP) through support from Global Environment Facility (GEF) Least Developed Country Fund (LDCF). 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 will work with partners to achieve this objective through 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, 2) increasing the reliability and improving the quality of water supply in targeted areas, 3) investing in cost-effective and adaptive water management interventions and technology transfer, and 4) improving governance and knowledge management for climate change adaptation in the water sector at the local and national levels.

At the end of the four years' implementation of the project, the Government of Solomon Island 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 National Adaptation Program of Action (NAPA) 2008, National Development Strategy (NDS) 2011 – 2020, National Water and Sanitation Sector Plan (2007).

In light of the above background, SIWSAP aims to recruit a hydrogeologist to lead, facilitate and conduct the hydrogeological survey/assessments at the six pilot sites under the project. The consultant will work closely with the SIWSAP PMU, WRD and other key government partners, Climate Change and WASH development projects, the UNDP Operations and Programme team, UN Agencies, and other Technical Experts and Advisors with other multi-lateral and bi-lateral donors/projects and civil society for a successful project implementation.

**Scope of work/Expected Output**

Under the overall guidance and supervision of the Deputy Director, Water Resources Division, and the SIWSAP Project Manager, this consultant is responsible for leading and facilitating of the hydrogeological survey and assessment under the project in close collaboration and partnership with key government partners (both national and provincial), other similar Climate Change and WASH projects, NGOs, Faith Based Organization and local communities. The consultant will have the following responsibilities:

- Provide an updated knowledge/information with maps of groundwater distribution and availability by conducting groundwater assessments for Gizo, Ferafalu, Taro, Tuwo, Tigoa and Santa Catalina. The Water Resource Division (WRD) of MMERE will provide support where possible to ensure tangible data are acquired.
- Create a basis for further groundwater development by reviewing existing data and or prior hydrogeological related assessment reports that are available for Gizo township. Undertake additional hydrogeological investigation for Gizo and other sites (if required).
- Conduct an earth resistivity survey and ground water leveling survey and analysis across all pilot sites to better understand the groundwater balance/potential in order to determine if a sustainable management regime can be established.
- In consultation with Water Resource Division, identify cost effective measures to extract ground water resources that will meet that demand of the local populace, taking into account the climate related water stresses.
- For each pilot site, provide assessment reports, including hydrogeological maps with recommendations for suitable groundwater interventions as adaptive measures based on the findings of the assessments.
- In carrying out the above tasks, the consultant is expected to work very closely with local staff of the WRD to ensure skills transfer/capacity building
- Support other related matters as maybe requested/required by the WRD and the project.

**The following are broader expected outputs and key milestones:**

- Finalised methodology for the proposed work;
- Site specific hydrogeological or groundwater assessments – Site characterization, description of hydrogeology and groundwater hydraulics.
- Draft hydrogeological/groundwater assessment report for each pilot site.
- Finalised hydrogeological/groundwater assessment report for each pilot site.

**Resources Provided**

The applicant will provide her/his own laptop for the duration of this assignment. Other necessary resources that may be required to support the assignment such as internet, stationeries, office space etc. will be provided by the project.

**Supervision/Reporting**

The consultant is expected to work under the direct supervision of the Deputy Director WRD and the SIWSAP Project Manager.

**Reporting Requirements:**

He or she will report to the Deputy Director WRD and the SIWSAP Project Manager in Solomon Island, UNDP Pacific Office – Solomon Islands, and the Regional Technical Advisor at the Multi-Country Office in Fiji for final clearance of deliverables.

**Requirement for Qualifications & Experience****▪ Minimum educational qualifications**

<b>Recruitment Qualifications</b>	
Education:	<ul style="list-style-type: none"><li>• Minimum of Bachelor's Degree in Science or engineering (geology with hydrogeology or related earth science.)</li></ul>
Experience:	<ul style="list-style-type: none"><li>• At least 5 years of experience in hydrogeological survey, groundwater assessments, drilling investigation with familiarity to Solomon Islands or South Pacific context.</li><li>• Experience in using geophysical instruments, specifically ABEM Terameter for ground water investigation</li><li>• Some experience in survey and geological mapping.</li><li>• Experience with good background knowledge of Integrated Water Resource Management, utilizing various management tools / interventions.</li><li>• Experience in implementing international, multilateral, bilateral donor funded and/or public sector water investment initiatives.</li></ul>
Competency	<ul style="list-style-type: none"><li>• Physical ability to travel by boat or small airplanes to the outer islands</li><li>• Capacity to work under extreme weather and environmental conditions.</li><li>• Culturally sensitive, friendly, and effective communication skills that is conducive to effective presentations and networking, and building trust required to complete tasks; Sensitive to and can demonstrate diplomacy and integrity within cultural complexities and unique political contexts.</li><li>• Delivers work on time; Proactive in updating work progress and raising any challenges and proposing practical solutions when delays and/or change of plans occur</li><li>• Experience in development administration with specific experiences in climate change and governance projects.</li><li>• Language: must be fluent in English and pidgin (both oral and written)</li><li>• Demonstrates capacity to plan, prioritize and deliver tasks on time to meet goals in a highly pressured environment and to support other colleagues in achieving similar goals.</li><li>• Demonstrates capacity to respond flexible and positively to change through active involvement and generation of innovative, practical solutions to challenging situations.</li></ul>

**Proposal Requirements****Technical Proposal**

Interested applicant should submit the following documents:

- Technical proposal including a P11 form (available on the UNDP website; <http://www.fj.undp.org>, an updated current CV, contact details of at least three referees and a cover letter setting out how the applicant meets the selection criteria, and a proposed approach and methodology)
- Letter confirming availability and Interest using UNDP template (available on the UNDP website: <http://www.fj.undp.org>)

**Financial Proposal**

The Consultant is requested to provide a quotation or the fees/cost (in SBD) for the services which will be rendered using the following format.

Daily consultancy rates	A daily consultancy rate proposed by the consultant
Air Ticket Estimate (UNDP will reimburse based on actual costs)	N/A
Living Allowance	Based on the number of days spent at the respective duty station
Other miscellaneous expense	Please state

**Travel;**

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

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

**Lump sum contracts**

The financial proposal shall specify a total lump sum amount, and payment terms around specific and measurable (qualitative and quantitative) deliverables (i.e. whether payments fall in instalments or upon completion of the entire contract). Payments are based upon output, i.e. upon delivery of the services specified in the TOR. In order to assist the requesting unit in the comparison of financial proposals, the financial proposal will include a breakdown of this lump sum amount (including travel, living expenses, and number of anticipated working days).

**Payment Schedule (if required):**

	<b>Deliverable</b>	<b>Target</b>
10%	Payment upon submission and acceptance of Final Methodology for proposed works.	8 <sup>th</sup> April 2017
30%	Payment upon acceptance of draft reports on Site specific hydrogeological or groundwater assessments – Site characterization, description of hydrogeology and groundwater hydraulics.	30 <sup>th</sup> June 2017
30%	Payment upon the acceptance of Draft hydrogeological/groundwater assessment reports for each pilot sites.	15 <sup>th</sup> July 2017
30%	Payment upon the acceptance of finalized hydrogeological/groundwater assessment reports for each pilot site.	3 <sup>rd</sup> August 2017

### **Evaluation Method**

#### **Cumulative analysis**

The proposals will be evaluated using the cumulative analysis method with a split 70% technical and 30% financial scoring. The proposal with the highest cumulative scoring will be awarded the contract.

Applications will be evaluated technically and points are attributed based on how well the proposal meets the requirements of the Terms of Reference using the guidelines detailed in the table below:

When using this weighted scoring method, the award of the contract should be made to the individual person whose offer has been evaluated and determined as:

a) responsive/compliant/acceptable, and

b) Having received the highest score out of a pre-determined set of weighted technical and financial criteria specific to the solicitation.

\* Technical Criteria weighting; 70%

\* Financial Criteria weighting; 30%

Criteria		Weight
<b>Technical</b>		<b>70%</b>
Education	<ul style="list-style-type: none"> <li>Minimum of Bachelor's Degree in Science or engineering (geology with hydrogeology or related earth science)</li> </ul>	10%
Experience	<ul style="list-style-type: none"> <li>At least 5 years of experience in hydrogeological survey, groundwater assessments, drilling investigation with familiarity to Solomon Islands or South Pacific context.</li> <li>Experience in using geophysical instruments, specifically ABEM Terameter for ground water investigation</li> <li>Some experience in survey and geological mapping.</li> <li>Experience with good background knowledge of Integrated Water Resource Management, utilizing various management tools / interventions.</li> <li>Experience in implementing international, multilateral, bilateral donor funded and/or public sector water investment initiatives.</li> </ul>	50%
<b>Competency</b>	<ul style="list-style-type: none"> <li>Physical ability to travel by boat or small airplanes to the outer islands</li> <li>Capacity to work under extreme weather and environmental conditions.</li> <li>Culturally sensitive, friendly, and effective communication skills that is conducive to effective presentations and networking, and building trust required to complete tasks; Sensitive to and can demonstrate diplomacy and integrity within cultural complexities and unique political contexts.</li> <li>Delivers work on time; Proactive in updating work progress and raising any challenges and proposing practical solutions when delays and/or change of plans occur</li> <li>Experience in development administration with specific experiences in climate change and governance projects.</li> <li>Language: must be fluent in English and pidgin (both oral and written)</li> <li>Demonstrates capacity to plan, prioritize and deliver tasks on time to meet goals in a highly pressured environment and to support other colleagues in achieving similar goals.</li> <li>Demonstrates capacity to respond flexible and positively to change through active involvement and generation of innovative, practical solutions to challenging situations.</li> <li>Ability to establish effective working relations in a multicultural team environment.</li> <li>Resourcefulness, initiative and maturity of judgement</li> </ul>	10%
<i>**If necessary interviews shall also be conducted as part of the technical evaluation to ascertain best value for money.</i>		
<b>Financial Proposal</b>		<b>30%</b>
<b>Cumulative</b>		<b>100%</b>

### Proposal Submission

1. **APPLICATIONS:** For a copy of the full TOR, please contact Ms Pamela Kama on e-mail: [pamela.kama@undp.org](mailto:pamela.kama@undp.org) or by phone on (677) 27446 or see her at the UNDP Solomon Islands Officer front desk Ground Floor, ANZ Haus, Ranadi (Opposite Marine School).
2. **Deadline of application submission:** Friday 20<sup>th</sup> March 2017, 12:00 pm local time (GMT +11)  
All applications must be submitted either electronically to [eddie.meke@undp.org](mailto:eddie.meke@undp.org), copy to [eddie.meke@undp.org](mailto:eddie.meke@undp.org) or addressed under confidential cover to:

**Hydrogeologist Expert (Full Time)**

**Attention: Eddie Meke, Procurement Assistant**

**UNDP Solomon Islands Sub-Office,**

**Ground Floor, ANZ Haus, Ranadi (Opposite Marine School).**

**All proposal should be submitted to this email address to the above email, failure to submit on this email address, will result in disqualification of proposals. No proposals will be accepted if submitted on Jobshop/ on this site**

Incomplete application will not be considered and only candidates for whom there is further interest will be contacted.

### **Further Information:**

*For further information concerning this Terms of Reference, contact Gloria Suluia, SIWSAP Project Manager on email [gloria.suluia@undp.org](mailto:gloria.suluia@undp.org) telephone +677 23093 at the Water Resources Division, Ministry of Mines, Energy and Rural Electrification Additional information including the Post Profile, Results-Oriented Curriculum vitae format and P-11 form is available from the UNDP website: <http://www.fj.undp.org> or the UNDP Solomon Islands Officer front desk Ground Floor, ANZ Haus, Ranadi (Opposite Marine School).*