VSA Assignment Description

Assignment Title	Geographic Information System (GIS) & Data Management Specialist
Assignment Modality	Standard in-country volunteer
Assignment Number	42067
Country	Samoa
Location	Apia
Partner Organisation	Live and Learn Environmental Education - Samoa (LLEE-Samoa)
Duration	12 months
Sustainable Development Goals	1 POVERTY 13 CLIMATE 15 UPE Image: A state of the s

1. Partner Organisation Overview

Live & Learn Environmental Education (LLEE) Society is a non-profit, non-political organization that comprise of a network of 12 autonomous nationally registered organizations across Asia Pacific, including LLEE-Samoa. A major project implemented by LLEE across the Pacific is the Climate Resilient Islands (CRI), funded by NZ MFAT, that aim to strengthen the resilience of rural community to the impacts of climate change through nature-based approaches. It has been implemented in 6 other Pacific Island countries, namely Fiji, PNG, Solomon Islands, Tonga, Tuvalu and Vanuatu. The CRI has three interconnected outcome areas:

- 1. Improved ecological resilience through nature-based land management
- 2. Enhanced community resilience through nature-based livelihoods and food security
- 3. Improved community preparedness and resilience to climate-related disasters.

The CRI programme uses a complex range of approaches and concepts, combining a diversity of activities communities can use to explore the interdependence of people and ecosystems, understand ecological complexity and develop nature-based plans for adaptation and resilience. LLEE recently launched a CRI toolkit that details a system communities can use to better understand their own context and help communities plan actions to build their climate resilience. LLEE-Samoa is in the process of joining the CRI programme, focusing on customizing the LLEE CRI toolkit for local communities, taking into consideration the lessons from, and experiences of, the other 6 Pacific Island countries.

LLEE-Samoa recognises that there have been several projects and programmes that have introduced a range of methodologies and approaches to strengthening resilience of village communities across Samoa. There were Coastal Infrastructure Management (CIM) Plans supported by the World Bank (WB) since 2002 and were expanded upon and revised in 2015 to become Community Integrated Management (CIM) Plans, with continued WB support and the Pilot Program for Climate Resilience and Adaptation Project under the Adaptation Fund, through UNDP.

The CIM Plans have been developed for all villages and 26 districts across the country and supported by a CIM Strategy (CIMS), that emphasize a whole of government approach for planning and implementation, "taking into consideration an integrated ecosystem-based adaptation approach and the ridge to reef concept".

There are also village community-based Conservation Area Management (CAM) Plans for several villages that have key biodiversity areas within their customary land boundaries and under the governance of their Village Fono (Village Councils). Thus, for the customization of the CRI toolkit for Samoa, LLEE-Samoa acknowledges the process need to be aligned with and applied within the context of the Village and District CIM Plans.

LLEE-Samoa also acknowledges there is a certain level of village community lethargy and fatigue regarding workshops and climate related participatory planning processes and are generally now focusing their interest and efforts on implementation of their CIM Plans, under the Government's \$1 Million Talā district program. As such, LLEE-Samoa is taking a bold and fearless approach to the customization and application of the CRI toolkit to ensure it adds the most value to the partnerships between the Government Ministries, coordinated the Ministry of Women, Community and Social Development (MWCSD) and Villages in the implementation of their CIM Plans.

The aim is to shift the focus of the CRI toolkit customization and support for evidence-based climate resilient planning processes to farming communities and farmer-based organizations instead of village and district-based communities. Where there is a need however, and if requested by a Village Fono or District Committee, the CRI toolkit may still be applied for village-based or district-based community planning processes to ensure alignment with the CIM Plans. Furthermore, the customization of the CRI toolkit for Samoa will also ensure alignment and with the implementation of the Samoa Agriculture and Fisheries Sector Climate Change Policy (SAFCCP 2023-2028).

The SAFCCP 2023-2028 "provides a framework of climate-smart actions and practices that sector members, stakeholders and partners should adopt, develop and implement to enhance response towards addressing climate change risks and impacts". In this regard, LLEE-Samoa aims as a priority, to address one of the significant challenges identified in the SAFCCP 2023-2028. That is, the limited local capacity and expertise in data collection and data management for evidence-based planning and decision-making.

2. Assignment Overview

LLEE-Samoa is seeking the expertise of a Geographic Information System (GIS) and Data Management Specialist to provide technical support in the customization of the LLEE CRI toolkit for Samoa, targeting farming communities, that align with the CIM Plans and the SAFCCP 2023-2028. The GIS Specialist will assist with customising and adapting the CRI toolkit by strengthening the LLEE-Samoa strategies, capacity and capabilities for the collection, collation, storage and interpretation of community-level geospatial and geography data. In doing so, this will assist farming communities to explore the interdependence of their farming decisions and land-based natural resources and ecosystems, as well as understand ecological complexity. As a result, the local communities can develop and implement nature-based plans for adaptation and resilience.

The GIS and Data Management Specialist will produce static and interactive maps, tabular products, and support LLEE-Samoa in analysis to help visualize agricultural activities and collect ecosystems geographic data using GIS to fit LLEE-Samoa's needs. The GIS and Data Management Specialist will strengthen the data lifecycle through information, communication, and technology (ICT), ensuring that information is clear and digestible and allow LLEE-Samoa to analyse and share with farmers and other stakeholders.

The GIS and Data Management Specialist will leverage GIS and predictive analytics across all components to inform the customization of the CRI toolkit for evidence-based decisions, towards strengthening resilience of farming systems, agri-businesses and of farming communities, within the context of CIM Plans that align with the SAFCCP 2023-2028.

The experienced volunteer in this specialised field will also support LLEE-Samoa in its decisions on the most effective way for improved monitoring and visualization (eg. dashboards on a digital platform). This may be an area to follow suit with after this particular volunteer assignment.

3. Goal/Outcomes/Outputs

Goal

At the end of the assignment;

- LLEE-Samoa will have GIS capabilities and digital-based tools, technical resources and technical capacity to generate empirical data and maps to help quantify and visualize the impacts of human activities on land-based natural resources and to facilitate the adoption of nature-based approaches.
- LLEE-Samoa will have knowledge management capabilities for improved support for evidence-based planning and decision-making and for stronger environmental, social and economic results.
- LLEE-Samoa will have data and evidence to be integrated with, and incorporated into, the storytelling by farmers and farming communities of their experiences in nature-based climate change adaptation measures. This is essence will be the **development impact** of this assignment.

Outcome 1

Strengthened capacity of LLEE-Samoa in data lifecycle and in utilization of GIS tools.

Alongside the team;

- Develop and customize the use of open-source GIS software (qGIS and qField) for simple mapping, and for analysing real data on farming systems of farmer organizations or of district/village communities in Samoa, generated from, but not limited to, the customization of the CRI toolkit.
- Develop and maintain GIS databases and data management systems tailored to the needs of LLEE-Samoa.
- Provide additional analytical breadth and depth to geospatial analysis, drawing on rich geospatial data and incorporating GIS-related data into evidence for adopting nature-based approaches in the management of natural resources.
- Develop customized maps, dashboards, and infographics to inform decision making and support adoption of nature-based approaches.
- Provide mentorship on data collection using QField, identify weaknesses and threats to data quality, as well as identify opportunities for quality control and improvement, including in the development of data collection protocols.
- Provide GIS training and mentoring to build capacity in incorporating GIS data in monitoring, evaluation and learning (MEL) frameworks for tracking indicators of climate resilience.

Outcome 2

LLEE-Samoa has capacity to establish and manage a digital platform to support the visualization of geospatial data and information from the customization of the *CRI toolkit*.

Alongside the team;

- Generate digital products and digital versions of outputs from CRI toolkit activities including community handwritten and hand drawn maps to enable story-telling.
- Identify opportunities and facilitate the use of GIS open-source software for collation and management of information.
- Contribute to the development of a digital platform to facilitate the CRI toolkit customization processes, and to support evidence-based decisions for adoption of nature-based approaches.

Outcome 3

LLEE-Samoa has strengthened partnerships with other stakeholders who are committed to strengthening resilience of farming systems and communities in Samoa through nature-based approaches.



Alongside the team and interest groups;

- Establish and foster partnership with tertiary institutions (NUS and USP) to facilitate student research projects in nature-based approaches to agricultural production and integrated farming systems, as case studies from, but not limited to, the customization of the CRI toolkit.
- Establish and foster partnership with the Samoa GIS User Group that was established in 2021 (Min of Natural Resource and Environment, SkyEye, Brown Consult).
- Contribute and build capacity of the team and associated partners in the documentation and dissemination of best practices, lessons learned, and success stories related to the use of GIS technology related to climate resilience of farming communities in Samoa.

4. Reporting, Working Relationships and Capacity Building

The GIS and Data Management Specialist volunteer assignment will contribute to LLEE-Samoa's long-term vision to educate, mobilise communities, and facilitate supportive partnerships to help move towards a sustainable future. He/she/they will contribute to LLEE-Samoa's work across six key thematic areas: climate change adaptation, environmental protection, disaster risk reduction and response, water, sanitation and hygiene (WASH), and gender and women's empowerment.

This VSA volunteer assignment will greatly assist LLEE-Samoa in establishing and fostering its partnerships with farming communities, government agencies and tertiary institutions. Overall, the assignment will help inform LLEE-Samoa's program management decisions, shape the longer-term strategic direction of programs and decision-making, and enable LLEE-Samoa to comply with donor reporting requirements and carry out effective monitoring and evaluation.

The volunteer will provide mentoring and training on the job and in planned workshop sessions. In addition, through LLEE-Samoa's partnership with the National University of Samoa and University of South Pacific (in Samoa), the volunteer will provide training for students in the use of qGIS and qField for collection of geospatial data relevant to climate resilience, as identified by farmers during CRI toolkit customization activities.

The outputs from the training will contribute towards the students' research projects. The proposed digital platform (Outcome 2) will also facilitate the participation of wider stakeholders in capacity building and shared learning.

The volunteer will report directly to the LLEE-Samoa Executive Board through the Food Systems Advisor and will be accountable to the Food Systems Advisor and the Executive Board. On a day-to-day basis, the volunteer will predominately work with the Food Systems Advisor and links to the Melbourne Head Office of LLEE.

The volunteer and LLEE-Samoa will have an ongoing relationship with the VSA Programme Manager in terms of assignment monitoring, reporting, professional advice and personal support.

As needs on the ground may change over time, the volunteer is encouraged to review and update the Assignment Description on arrival in consultation with the partner organisation and VSA Programme Manager. By their very nature, development situations can involve significant change, so it is advisable that the volunteer periodically reviews and reflects on the Assignment Description throughout the Assignment to ensure the best development outcomes are being achieved.



5. Selection Criteria/Position Requirements

Professional Specifications

Essential

- Bachelor's Degree Computer Science, Data Sciences, Geographic Information Systems, or related field
- Minimum of 5 years of relevant experience in database administration
- Demonstrated experience in the use of GIS equipment and programming
- Sound understanding of data migration methodologies and tools
- Experience developing guidelines and standards for the storage and retrieval of data
- Excellent communication skills verbal and written
- Experience in training, coaching and mentoring

Desirable

- Detail orientation with commitment to data accuracy and integrity
- Ability to deliver on tasks in a timely manner

Personal Specifications

Essential

- Cultural sensitivity and ability to adapt to a new culture and context
- Ability to effectively collaborate with diverse stakeholders at national and community levels
- Ability to work in challenging situations with limited resources that require initiative
- Flexibility and willing to work with others to strengthen GIS skills
- Ability to effectively in a team environment and capacity to problem solve

Desirable

- Ability to maintain a positive attitude no matter the circumstances
- A willingness to learn the Samoan language history and culture

6. VSA Essential Attributes

- Commitment to volunteering, to VSA and to the partner organisation
- Cross cultural awareness
- Adaptability and a willingness to approach change or newness positively
- Able to form good relationships, both personally and professionally, with work colleagues and in the community
- Resilience and an ability to manage setbacks
- Initiative and resourcefulness
- An ability to facilitate learning through skills exchange

7. Country Context

For more information about Samoa, see VSA in Samoa

Refer also to the following links;

- Untold History of Samoa: <u>Untold Pacific History | Episode 3: Samoa NZ's Colonisation of Samoa & the Mau Movement | RNZ Bing video</u>
- New Zealand Aid Programme in Samoa: <u>MFAT NZ & Samoa-4YP.pdf</u>
- Samoa Government Website: <u>Government of Samoa (samoagovt.ws)</u>
- Samoa Tourism Authority: <u>Samoa Tourism Authority Corporate Website</u>
- Pocket Guide of Samoa: <u>A Brief History of Samoa 🔋 Samoa Pocket Guide</u>
- Samoa Pocket Guide: <u>Samoa Pocket Guide Samoa's #1 Travel Guide</u>
- Beautiful Samoa: <u>Uncover the History of Beautiful Samoa | Samoa Tourism</u>

8. Living and Working Situation

The VSA Samoa office will source basic and comfortable furnished accommodation prior to the volunteer's arrival in country. In some circumstances volunteers may be asked to share accommodation.

For the Samoa Office at this stage we are housed with the Samoa Conservation Society based at the Samoa National University Campus located at Mulinuu. LLEE-Samoa is currently negotiation a potential move to the Pacific Climate Change Centre housed with the Secretariat of the Pacific Environmental Programme at Vaoala - Apia.

This is near the New Zealand High Commissioners Compound. It will be a very safe working space. The SPREP Office is about 10 minutes from the main Apia town centre. There are buses and taxis available.

Additional Information

Standard Assignment (12 months or more)

Residency status

VSA volunteers must be New Zealand citizens or have New Zealand permanent residency status, and currently living in NZ.

Pre-departure briefing

As part of the volunteer's contract, successful candidates will be required to take part in a predeparture briefing course run by VSA in Wellington and complete all required pre-reading.

Final appointment

Final appointment will be subject to satisfactory medical and immigration clearances (costs covered by VSA), partner organisation acceptance, and successful completion of the pre-departure briefing course.

Family status

VSA supports partners to accompany volunteers on assignments of six months or longer. However, volunteers with accompanying dependents will not be considered for this assignment.

Fundraising

VSA funding stakeholders are both the Ministry of Foreign Affairs and Trade (MFAT) and donors. We ask volunteers and accompanying partners to fundraise to help cover the cost of sending volunteers throughout the Pacific and beyond. Fundraising can be as simple as doing something you enjoy with a group or friends, and our Fundraising team is available to help you every step of the way.

Vaccination requirements

Potential volunteers are advised that VSA's insurers require volunteers to be vaccinated, prior to departure, in accordance with the instructions of VSA's medical adviser. VSA covers the cost of any required vaccinations.

Children's Act

While on assignment, VSA volunteers may be required to work with children and/or may choose to participate in informal activities in their own time that involve interactions with children (such as coaching teams or teaching English). VSA is committed to the protection of vulnerable children and adults, which also includes meeting our commitment under the Children's Act 2014.



The information requested during the application process is necessary to assist VSA to determine applicant suitability to work and/or interact regularly with children and is part of a series of pre-selection checks undertaken on all applicants for VSA assignments.

Volunteer package

The volunteer's package includes the following:

Reimbursements and grants

- The volunteer may be entitled to an establishment grant to help them set up in their country of assignment, and a rest and respite grant after a specified period of active service in-country to encourage the volunteer to take a break away from the immediate assignment location. These grants depend on the length and location of the assignment. The volunteer's contract will specify any grant entitlements.
- 2. A resettlement grant of NZ\$200 will be paid for each month the volunteer is on assignment. This is payable on completion of the assignment.
- 3. The volunteer will receive a monthly living allowance of \$1900 SAT.

Accommodation

Basic, comfortable furnished accommodation will be sourced by VSA. In some circumstances volunteers may be asked to share accommodation.

Airfares and baggage allowance

VSA will provide the volunteer with economy airfares to and from New Zealand for their assignment plus a baggage allowance.

Insurance

VSA will provide travel insurance to cover baggage and personal property, and non-routine medical expenses for the duration of the assignment. Further details of the insurance cover will be provided during the volunteer pre-departure briefing.

Utilities

VSA will reimburse volunteers reasonable expenses for household utilities while on assignment.

Final terms and conditions relating to the specific volunteer assignment will be confirmed in a personalised volunteer contract.

