

A review of the soil and agronomic constraints and opportunities in Pacific food garden systems



Key details

Location

Fiji, Samoa, Tonga

Duration

Start May 2023

End Mar 2025

Budget

AUD 250,000

Commissioned organisation

Plant & Food Research, New Zealand

Partners

The New Zealand Institute for Plant and Food Research Limited

Project Leader

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Program

Soil and Land Management

Project code

SLAM/2022/180

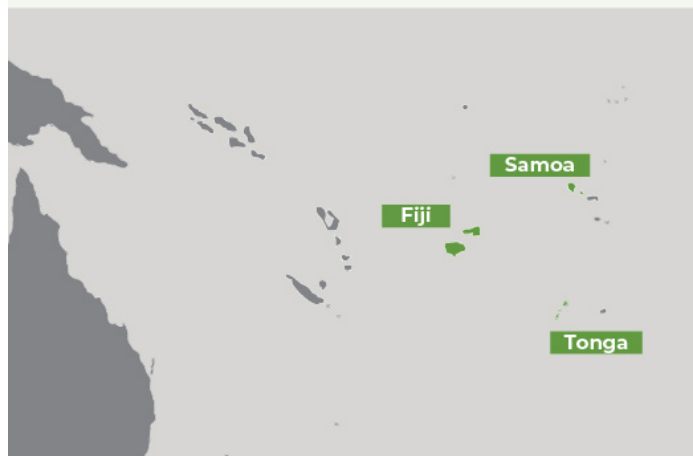
Overview

This project aims to provide a baseline exploration of Samoan home and community garden nutrient pathways, explicitly from soil to crop to household consumption to enhance the supply of nutritious produce.

This research activity acknowledges the high prevalence of human nutrition-related diseases within the Pacific and seeks to identify research, practice, and knowledge gaps for home or community gardeners. Specifically, this project seeks to help households manage their gardens and grow crops that can aid the pathway of plant-based nutrition into households to enhance household health and enhance food access, security and resilience. The project will limit focus in Samoa to vegetable cropping to align with the resources of the program size while recognising that the vegetables sit within a wider food system in the Samoan food garden.

A core focus is to develop a methodology of connecting the home or community garden with household nutritional pathways and values. In this way, the methodology established can be expanded wider in the future.

While this project focuses on Samoa, it is expected that the opportunities arising from the pathways identified in this research will have reach and applicability into the wider islands and atolls of the Pacific.



Project activities and expected outcomes

- Undertaking a desktop study to draw on the academic and grey literature of consumption patterns, socio-cultural practices of Samoan households and gardening, and nutrient density of key traditional and introduced crops.
- Establishing relationships with local partners, identifying priorities in terms of target locations, and identifying any further local research capacity required.
- Conducting on-site visits to selected home gardens. Sample collection, home garden design and cultivation recording, interview to elicit risk management, cultural perspectives, and household utilisation of fruit and vegetables grown.
- Testing of samples and analysis of all data highlighting nutrient budgets, key constraints and practices arising. Assessment of new crop options with a focus on dietary nutrition access and fit for cultivation in Samoa.
- Connecting with participating home gardens to talk through sample results (returning data).
- Conducting multi-stakeholder workshops to discuss results and potential innovations or recommendations with different stakeholders from the community and also potentially policy and wider Pacific Island Countries.



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