

Integrating protected cropping systems into high value vegetable value chains in the Pacific and Australia

Overview

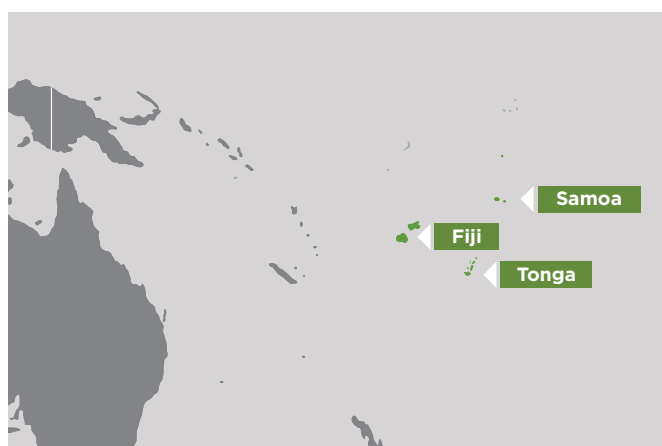
Vegetable production in the Pacific Islands does not match local demand. Imports supplying high value hospitality and food service markets contribute to Fiji experiencing a shortfall of several hundred tonnes per year.

If local producers could meet this demand, income from high-value vegetable production (tomato, lettuce, capsicum, cucumber, brassicas, potato and melon) would improve the livelihoods of producers and their communities.

In Fiji, Samoa and Tonga, protected cropping systems for small- and medium-scale farmers is a new and potentially transformational technology for vegetable production. However, issues in both biophysical and socio-economic areas need to be resolved to enable broad adoption and positive livelihood outcomes.

A range of protected cropping technologies for smallholders have been evaluated in the Philippines and Vietnam, but production capability does not guarantee market success. Value chains must be developed to connect farmers using these systems to high value markets for fresh vegetables.

Establishing coordinated, small-scale grower groups and supporting them to develop business and marketing skills can help smallholders gain and maintain access to high value markets.



KEY FACTS

ACIAR Project No. HORT/2014/080

Duration: April 2017 to December 2020 (5 years)

Target areas: Fiji, Samoa, Tonga

Budget: A\$1,325,082

Project Leader

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Key partners

- Queensland Department of Agriculture and Fisheries (DAF), Australia
- University of the Sunshine Coast, Australia
- Pacific Community (SPC), Fiji
- Soil Health Pacific Ltd, Samoa
- Ministry Agriculture, Forests and Fisheries, Tonga

ACIAR Research Program Manager

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Objective

The project's overall aim is to strengthen value chains for high-value vegetables through innovations in technology and business organisation. It also aims to increase and consolidate the capacity of smallholder vegetable growers to generate income through technological innovation and enterprise development.

The project's three main objectives are to:

- Evaluate key technologies and production practices to enable protected cropping of vegetables by smallholders.
- Increase adoption of protected cropping in market-oriented value chains for out-of-season vegetable production.
- Identify strengths and weaknesses of different market-oriented vegetable value chain configurations and build capacity of players in these value chains.

Expected scientific results

- Improved understanding of the functional components at the individual chain level.
- Additional information for potential participants in chains on the opportunities and risks of chains with different configurations and features.
- Improved awareness of social and cultural factors that may impact chain configuration or sustainability of different grower groups in each configuration.
- Increased awareness of land tenure arrangements and their effect on market access and livelihoods impacts at the household and regional scale.
- Increased knowledge base for other researchers examining commercial rural enterprise development.
- Demonstrated approach that involves setting protected cropping (technical) research firmly in the context of specific value chains and social and economic contexts for comparison between countries.

Expected outcomes

- Increased capacity of project participants to adopt innovative cropping systems, and capability to encourage adoption of the technologies among other smallholder farmers.
- Increased business skills and value chain connections required for small holders to progress from opportunistic seasonal production to full scale agribusiness and production of vegetables for targeted markets.
- Capacity to ensure consistent supply and product quality to meet market specifications.
- Improved livelihoods of vegetable growers and their communities as vegetables become a high value cash crop with a longer production season.
- Improved health and lifestyles through increased domestic availability of vegetables.
- Greater business opportunities in production and input provision for the protected cropping systems.

