Livestock



#### Australian Government

Australian Centre for International Agricultural Research

# Improving small ruminant production and supply in Fiji and Samoa



# **Overview**

Fiji and Samoa both experience high demand for sheep and goat (small ruminants) meat for both domestic consumption and cultural purposes.

Both countries also have large numbers of poor farmers for whom small ruminant (SR) farming is important. However, production and marketing systems for SRs and their meat are not meeting their potential in terms of animal productivity and engagement with higher value market chains in either country.

A previous ACIAR project found that of the Pacific Island Countries (PIC), Fiji and Samoa have the strongest demand for sheep and goat meat, government support for the industry, growing sheep and goat populations and the potential for productive grazing livestock systems. There is also a particularly strong opportunity for smallholders and semi-commercial farmers in the retail markets of both countries, via import substitution.

However, a greater understanding is required of which production systems would enable Fiji and Samoa's local producers to better supply their local markets; how sheep and goats fit into the livelihoods of rural households; and ways to increase the participation of semi-commercial and smallholder farmers.



# **KEY FACTS**

ACIAR Project No. LS/2017/033 Duration: July 2019 to March 2023 (3 years, 9 months) Target areas: Fiji and Samoa Budget: A\$1,850,004

#### **Project Leader**

Dr Frances Cowley, University of New England

#### **Key partners**

- Ministry of Agriculture, Fiji
- Ministry of Agriculture and Fisheries, Samoa
- University of the South Pacific
- Fiji National University
- Charles Sturt University

ACIAR Research Program Manager Dr Anna Okello



### Objective

The overall goal is to improve the livelihoods of smallholder and semi-commercial SR producers in Fiji and Samoa by improving on-farm production efficiency and increasing their capacity to meet strong domestic demand for sheep and goat meat.

The objectives are to:

- Assess productivity of current production systems and understand the costs, benefits and motivations for men and women farmers to make improvements in these areas.
- Test innovations to improve husbandry and feeding systems to improve management of feed gaps, reduce mortality and improve SR turn-off rates.
- Evaluate the effectiveness of current worm control strategies in Fiji and Samoa, and develop options for improving worm control and use of anthelminthics.

### **Expected scientific results**

- Adaptation of proven technologies to suit the production systems, and overcome social and livelihood constraints, of smallholder and semicommercial farmers in Fiji and Samoa.
- Increased knowledge of the efficacy and persistence of modern drench families in goats as compared to sheep, with practical applications beyond the PIC.
- More widespread use of social inclusion strategies as part of participatory research design.
- Focus of future research on profitable and constraining aspects of sheep and goat production in Fiji and Samoa.

## **Expected impact/outcomes**

- Increased production of weaner lambs and kids per breeding female and per hectare of land.
- Decreased impact of nutritional constraints and worms on production systems.
- Increased local ability to effectively produce SRs and implement livestock research on-station and on-farm.
- Ability to increase production of marketable stock without increasing breeding flock size.
- Increased profitability of SR flocks due to reduced cost of production and increased turn-off rates due to more effective drenching practices, fewer nutritional constraints, and increased productivity of breeding flocks.
- The implementation of a social inclusion strategy with the research to ensure the increased benefits of SR production are shared widely within households, by both women and men.



