



# Developing pearl industry-based livelihoods in the western Pacific

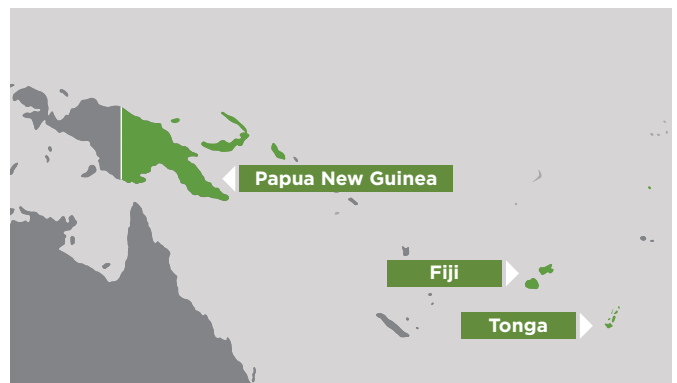
## Overview

Pearl farming is the Pacific region's most valuable and highest priority aquaculture activity. It is compatible with traditional lifestyles, and offers livelihood opportunities to coastal communities through juvenile oyster ('spat') collection, growing juvenile oysters, and production of half-pearls (mabè) and mother-of-pearl handicraft items.

These livelihood opportunities are recognised in French Polynesia, where pearl farming has been actively introduced to remote atolls and islands. But pearl culture and associated economic and livelihood opportunities are under-developed in western Pacific countries.

Recent ACIAR projects have shown a sound basis for development of the pearl culture industry in western Pacific countries, addressed regional aquaculture priorities and supported broader impacts/benefits in coastal communities.

The Secretariat of the Pacific Community has identified key objectives for future development of pearl culture in the Pacific: improved economic return; maximised participation and benefits; and sustainable production. All key regional objectives are addressed in this project.



## KEY FACTS

**ACIAR Project No.** FIS/2014/060

**Duration:** 1 September 2015 to 31 August 2020

**Target areas:** Tonga, Fiji, Papua New Guinea (PNG)

**Budget:** A\$2,264,618

### Project Leader

Professor Paul Southgate, University of the Sunshine Coast

### Key partners

- James Cook University
- Ministry of Agriculture, Forests, Food and Fisheries, Tonga
- National Fisheries Authority, Papua New Guinea
- Ministry of Fisheries and Forests, Fiji Islands

### ACIAR Research Program Manager

Dr Ann Fleming

## Objective

**The project's overall aim is to increase resilience, productivity, community engagement and livelihood opportunities from pearl farming in Fiji, Tonga and Papua New Guinea (PNG).**

### The project's specific objectives are to:

- Consolidate and expand the community-based spat collection program (Fiji).
- Consolidate and expand community-based half-pearl (mabé) production (Fiji and Tonga).
- Expand pearl and mother-of-pearl (MOP) handicraft production by community and women's groups (Fiji, Tonga and PNG).
- Evaluate the economic and socio-economic impacts of pearl-based livelihood development in partner communities.

## Expected scientific results

- Development of productive and sustainable culture systems for pearl oysters that will facilitate uptake by pearl farmers.
- Improved spat collection methods and half-pearl production methods, and increased knowledge of pearl oyster husbandry that will support sustainable industry development.
- Broad application of findings within the fields of molluscan and pearl oyster aquaculture.
- Publications in scientific literature that will improve perception of research and research needs in the region, particularly relating to culture methodology and application of pearl culture for livelihood support and development.
- Increased implementation of mariculture and associated activities as a livelihood opportunity in the western Pacific.
- Potential benefits to the Australian pearling industry from the research findings generated by this project.

## Expected outcomes

- Greater industry and community capacity for sustainable culture of pearl oysters in the partner countries and the western Pacific.
- Increased export income due to expansion of pearl industry.
- Greater opportunity for individuals and community groups to participate in pearl culture and associated activities.
- Improved livelihood opportunities for women and youth.
- Potential uptake of research findings by the Australian pearling industry.

