

Pearl industry development in the western Pacific



Key details

Location

Fiji, Papua New Guinea, Tonga

Duration

Start Apr 2013

End Jun 2017

Budget

AUD 1,154,052

Commissioned organisation

James Cook University

Partners

Hainan University; China; Ministry of Agriculture and Food; Forests and Fisheries; Ministry of Fisheries and Forests; National Fisheries Authority; Secretariat of the Pacific Community

Project Leader

Paul Southgate - James Cook University

Program

Fisheries

Project code

FIS/2009/057

Overview

This project aimed to provide a sustainable basis for continued

development of cultured pearl industries in Fiji and Tonga and to determine the feasibility of half-pearl culture in Papua New Guinea based on methods developed in Tonga.

Cultured pearls are the Pacific region's most valuable and highest priority aquaculture commodity. Pearl culture is compatible with traditional lifestyles and provides several opportunities for generating income. Individuals may catch spat (juvenile oysters) to sell to pearl farms; grow pearl oysters to produce mother-of-pearl, half-pearls or round pearls; work directly for pearls farms or associated ventures; or produce pearl shell/pearl handicrafts and jewellery.

Pearl culture is environmentally benign and the product is small, lightweight and non-perishable and valuable, making it an ideal export commodity from Pacific island countries. Potential economic and livelihood opportunities provided by pearl culture are underdeveloped in the western Pacific which contributes less than 1.5% of the regional value of the industry. There is a sound basis to develop pearl culture in the western Pacific, addressing regional aquaculture priorities and benefiting coastal communities.

Project outcomes

 developed more effective hatchery culture methods for the black-lip pearl oyster (Pinctada margaritifera) and winged pearl oyster (Pteria penguin);

- enhanced sustainable development of the cultured pearl industries in Fiji and Tonga; and
- undertook baseline studies for development of pearl culture in Kavieng, Papua New Guinea.
- built on outcomes from other ACIAR projects (FIS/2006/172 and FIS/2006/138).



