



PARDI FACT SHEET

Harnessing the true potential of South Pacific pearls

Pacific Agribusiness Research for Development Initiative

The PARDI project 'Supporting development of the cultured pearl industries in Fiji and Tonga', aims to help develop commercially vibrant cultured pearl farming industries to improve the livelihoods of communities in Fiji and Tonga and to enable pearl investors to harness the true potential of this valuable commodity.

The pearl project team includes South Pacific Island and Australian commodity, agribusiness and extension specialists and economists who started the four-year project in January 2011.

Empowering communities and powering business investment

Pearls are the gems of the sea. The variety of pearls and pearl products on today's market range from pearl-shell jewellery and handicrafts sold by lower-end souvenir traders right through to high-end jewellery sold to clients for hundreds of thousands of dollars.

PARDI pearl research is designed to attract investment in the multi-million dollar, diverse Fijian and Tongan pearl industries while ensuring that small holders achieve sustainable and profitable development of one of their most precious commodities.

In the southern hemisphere, the sale of raw cultured pearls is approximately US \$504 million per annum. While several South Pacific Island communities profit from the harvesting and sale of cultured pearls, the Fijian and Tongan industries have significant potential to expand and evolve the production and sale of raw cultured pearls and a wide range of cultured pearl and pearl-shell products.

Across the South Pacific Islands total sales of cultured pearls is worth around US \$176 million per annum. French Polynesia and the Cook Islands generate the bulk of this income. In French Polynesia cultured pearls (the export of raw pearls) earns approximately \$170 million per annum and in the Cook Islands, cultured pearls

generate between \$1 to \$2 million per annum. Fiji and Tonga together earn approximately \$2 to \$3 million per annum and have the capacity to earn significantly more through the export of raw pearls and the development and sale of pearl and pearl-shell products.

Pearl project goals and activities

The major goals of the PARDI pearl project are to maximise the export potential of pearls in Fiji and Tonga, boost community involvement in the industry and increase domestic earnings.

Ultimately, PARDI researchers aim to enable Fiji and Tonga to enhance the quality of their cultured pearl products and work towards internationally recognised brands.

PARDI pearl activities include the following.

- A review of the Fijian and Tongan cultured pearl industries in conjunction with grower associations, fisheries groups, industry and government representatives to benchmark current and future industry performance.
- The development and dissemination of Industry Development Plans following planning meetings across Fiji and Tonga.
- Working with local industries to expand village-based spat collection programs in Fiji and increase the production capacity of pearl oyster hatcheries in Tonga.
- The development and presentation of support materials such as local farm manuals and industry guidelines.
- Value adding through the establishment of tools to measure and improve pearl quality and identification of profitable pearl products through scoping and branding activities.



Australian Government
Australian Centre for
International Agricultural Research



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Looking to the future

By 2014, PARDI aims to empower the Fijian and Tongan cultured pearl industries to achieve the following.

- Organise their industry bodies and facilitate the adoption of an industry development plan.
- Develop a sound resource base to assist industry expansion and increase community involvement in cultured pearl industries.
- Expand local mother-of-pearl handicraft industries and other areas of production with a view to reducing imported pearl products.
- Significantly increase overall export income and increase opportunities for income generation across the industry.

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Pearl facts

- A pearl is a hard object produced within the soft tissue of a living shelled mollusc.
- The most valuable pearls occur naturally in the wild, but are extremely rare. These ‘wild’ pearls are referred to as natural pearls.
- Cultured or farmed pearls from pearl oysters and freshwater mussels make up the majority of pearls on the market.
- The cultured pearl process generally begins with the collection and maintenance of spat (young oysters). Once large enough, selected oysters are then implanted with a nucleus (a bead made from mollusc shell) and a small piece of tissue from a donor oyster. This tissue grows around the nucleus and begins to secrete mother of pearl. This process ultimately results in the formation of a cultured pearl which is harvested after about two years.
- Pearl value is based on the ‘five virtues’ of pearl quality, which are colour, size, lustre (more reflective pearls are more valuable); shape; and surface perfection.
- Pacific pearls can display an exceptional range and depth of colour and overtones, from white to bluish green to gold and chocolate brown.

For further information

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About PARDI

PARDI: ‘Pacific Agribusiness Research for Development Initiative’ commenced in February 2010. The project is co-ordinated by The University of Queensland and funded by the Australian Centre for International Agricultural Research (ACIAR).

PARDI seeks to create sustainable livelihood development outcomes for the South Pacific forestry, fisheries and crop-based sectors. PARDI scientists undertake supply chain and market-driven research to identify constraints that impede local economic development. Their research involves working towards tangible solutions such as new skills for locals, new technologies and product options.

PARDI is a partnership involving The University of Queensland under the Queensland Alliance for Agriculture and Food Innovation (QAAFI), the University of the South Pacific, the Secretariat of the Pacific Community, University of Adelaide, James Cook University, University of the Sunshine Coast, the Queensland Government’s Department of Employment, Economic Development and Innovation (DEEDI) and Southern Cross University.