

## Low-cost freshwater prawn aquaculture trial in Samoa

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*The indigenous freshwater prawn *ula vai* (*Macrobrachium* lar) is currently being farmed in Samoa on a pilot scale. This is an outcome of an SPC-funded training workshop in 2013 run by Glen Alo, who is an aquaculture staff member of the Vanuatu Fisheries Department. Glen has run similar trials in South Santo in conjunction with SPC and the Australian Center for International Agriculture Research.*

*Ula vai* was identified in Samoa's Aquaculture Management and Development Plan for 2012 as a potential species for aquaculture. Advantages of rearing *ula vai* include local markets where it can be sold, its high value, much traditional knowledge about its ecology and behaviour, its low place on the food chain, and the fact it is indigenous to Samoa. Disadvantages of rearing *ula vai* include a lack of technical knowledge, the need for special ponds with plastic sheet fences (otherwise the prawns climb out), and the scale of farming limited by the availability of captured juveniles.

In order to help overcome these disadvantages, SPC asked the Vanuatu government whether Glen Alo would be able to visit his Samoa Fisheries Department counterparts for a week. Under his guidance, a special pond was surveyed and constructed at the Lotofaga tilapia demonstration farm at Safata on Upolu Island. Alo demonstrated how to stock ponds with very small prawns that are captured from nearby streams.

These prawns are now well on their way to being a harvestable size. When staff from SPC's Aquaculture Section visited in April 2014, one pound of the largest

prawns had already been sold, at a price of WST 10/lb (equal to about USD 8.60/kg). This sale qualifies Samoa to be the second country in the world (after Vanuatu) to report to the Food and Agriculture Organization of the United Nations that there is commercial aquaculture production of *Macrobrachium lar*!

The pond is 6 m x 6 m in size and has clean clear, fast-flowing water piped in by gravity flow from the same stream where the juvenile prawns were captured. The prawns are being fed on a combination of tilapia pellets, grated coconut, papaya, cabbage (*pele*) leaf, and sweet potato (*umala*). When asked, "Does the farming of *ula vai* pose any problems?", the farm's owners Fa'aliga Lau Pepese and her son Viliamu answered, "Not really".

### For more information:

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*The special pond built for *Macrobrachium* lar capture-based aquaculture in Samoa, and the team behind its construction and operation. Front row (from left to right), Ferila Samuēlu, Fa'aliga Lau Pepese, Sapeti Tiitii, Sesilia Luamanuē. Back row, Unity Roebeck, Pati Fatutolo Lene, Mr Tuna, Viliamu Lau Pepesi.*