

## Namdrik (Marshall Islands) black pearl project summary report: encouraging progress

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### Namdrik black pearl project

Preliminary survey work by the Marshall Islands Marine Resource Authority (MIMRA) in this atoll suggested stocks of pearl oysters adequate to envisage their culture as an economic activity. The Commission was requested to provide a specialist to work with the Island Council in setting up a demonstration farm and to make recommendations to the government on a suitable institutional framework within which such an industry might be developed in the Marshalls.

Consultant Mr Julian Dashwood, of the Cook Islands Ministry of Marine Resources, spent three weeks on Namdrik during which time he was able to deploy spat collectors, establish a sub-surface pilot farm, and discuss with the people of the islands a pearl oyster management plan for the lagoon. The presence of good stocks of pearl oysters was confirmed, although not in the quantities initially estimated by MIMRA. Specific plans were laid down for the continuation of the programme and for building up the number of spat collectors over the next 12 months.

This project was funded jointly with FFA and USAID, who provided substantial quantities of equipment for the establishment of the farm, and logistical support.

The initial deployment of spat-collectors in the Namdrik lagoon took place in November 1990. About 3,250 spat bags were deployed at that time. At the same time about 150 juvenile black-lip oysters (*Pinctada margaritifera*) were collected from the wild stock. An underwater platform was also constructed.

In April 1991 another 750 spat collectors of the imported type were deployed. Another 300 spat collectors were constructed from local materials (*Pemphis acidula*) and were put out for trial. Settlements were found on these, but not as much as the imported materials.

With the average of 10 young oysters in a sack it would be safe to conclude that the spat collection programme in Namdrik is a success. It is also suspected that the deployment in

November 1990 was in the midst of a peak spawning period because of large settlements found in the sacks three months later. Due to fear of overcrowding and feeding competition, some young oysters were taken out of the sacks and put in lantern-type baskets (35 cm x 35 cm, polyethylene). There are now 100 baskets hanging with 20 young oysters in each basket.

Greater settlements were found in collectors using the Christmas tree mussel rope. Old mooring ropes were also collected and tried as spat collectors but were not as effective as the mussel rope. It was also observed that at least one other species of oyster is settling in these spat bags.

Collecting of young oysters from the wild stock continues. Today, over 3,000 oysters have been collected from wild stock population in the Namdrik lagoon. Collection of wild stock will continue until November 1991 or until 10,000 young oysters have been collected from the wild population, beginning the nucleus of a pearl farm project. These collected oysters are drilled and tied to a branch line which is then hung on a sub-surface main line or an underwater platform already in place.

At the moment the project is in need of additional materials. Orders have been placed for more ropes, spat bags and spat-collectors, and baskets. The major activities right now, while awaiting more materials, are cleaning the shells, keeping a close watch on the spat lines, and collecting young wild oysters. It is the plan of the MIMRA staff to go and spend up to three months deploying more spat collectors and to have a closer observation of progress on the project site.