Indonesia

In Ambon, the project node managed by Dr Sigit Dwiono of LIPI (Indonesian Institute of Sciences) will concentrate on standardising the use of concrete cages for producing larger juveniles (30–50 mm) in coral reefs off the township of Morella for reseeding. A pilot hatchery was set up at Morella and managed by the villagers under the guidance of LIPI. Villagers were involved in the daily activity pertaining to the care and maintenance of the juveniles in the hatchery and providing security to the reseeded sites.

The Indonesian node will assess the impact of reseeding with different size class of juveniles (30, 40 and 50 mm) on the reseeded reefs.

Vanuatu

In Vanuatu, the trochus hatchery belonging to the Fisheries Department continues to work well under the guidance of Mr Moses Amos, the Director of Fisheries, and Kalo Pakoa, the project scientist. A large number of juveniles has currently been produced for research involving studies on:

- mass reseeding with small (1–3 mm) juveniles in natural and manipulated habitats;
- determining suitable types of cages and optimum densities for stocking in cages for intermediate culture of trochus to 30–40 mm for subsequent reseeding.

Conclusion

The success of the proposed research work will establish simple methodologies for reseeding with hatchery-produced juveniles and restocking with mature broodstock. In conjunction with appropriate management regimes and traditional management practices, it will provide a pathway for restoring and re-establishing trochus in depleted reefs. However, whether the research will lead to the establishment of a sustainable trochus fishery in the three countries involved will be a real challenge.

News from New Caledonia

Recent developments in trochus shell export from New Caledonia

Régis Etaix-Bonnin

The oldest statistics on trochus exploitation in New Caledonia date back to 1907 and concern the export of raw shells for the food preparation market.

These data indicate a strong variability in exports over time (saw-tooth curve), thereby demonstrating the fragile nature of the trochus stock, with periods of low export succeeding periods of significant harvests (1946–1954 and 1975–1984), which themselves had been made possible by previous periods allowing regeneration of the stock (Second World War and the mining boom of the 1960s).

Since the second half of the 1980s, tonnage levels have remained low, i.e. less than 300 tonnes annually. In addition, over the past five years, there has been a drop in exports as shown in Table 1.

This drop in exports is apparently not due to tension on the market as the average per-kilo prices remained quite steady over this period.

The persistence of low tonnage levels for more than a decade at levels far below the 400 tonnes given in an ORSTOM (now the IRD- French Re-

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search Institute for Development) report as the optimal level for New Caledonia's trochus stock exploitation raises a bit of concern about this stock's current state of health.

In any event, it is certain that the study of this resource requested by New Caledonia's Northern Province will make it possible to get a more precise idea of the status of the local trochus stock, which will then allow the current regulations setting the minimum harvest size for these molluscs at 9 centimetres to be modified.

Table 1. **Trochus exports from New Caledonia, 1994–1998**

	1994	1995	1996	1997	1998
Quantity (tonnes)	273.7	250.0	197.4	124.7	151.3
Value (US$)*	1,129,504	1,057,635	860,994	603,717	700,227
Average price (US$ per kilo)*	4.13	4.23	4.37	4.84	4.63

* For US$ 1.00 = 115 CFP

new publications & abstracts

KIKUTANI K. & H. YAMAKAWA. (1999). **Marine snails seed production towards restocking enhancement basic manual.** Field Document no. 14. South Pacific Aquaculture Development project (II), Food and Agriculture Organization of the United Nations. GCP/RAS/116/JPN, Suva Fiji, and Tonga Aquaculture Research 58 p.

This manual has been produced to help aquaculturists in seed production of marine snails in their respective tropical island nations. It was produced by the participants to regional training workshops held in Tonga in February–March and March–April 1998. It has been conceived with the following objectives:

- to help other aquaculturists in the region to produce the marine snail seed which is an important resource for the region;
- to provide a simple, easy-to-follow guide on seed production and restocking methods for marine snails; and
- to create awareness of the importance of stock enhancement.

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