

However, two other 'low value' species, referred to as ripplefish (US\$ 3/kg) and snakefish (US\$ 1/kg) (scientific names unknown), also feature on the exporter's list of 19 species

Certainly, too, there are other low value species such as *Bohadschia similis* (see Guille et al, 1986), which is thin-walled (3 - 4 mm thick), and similar to brown sandfish (but more cream in colour) which is collected in shallow water and processed as beche-de-mer today.

This species has traditionally been considered of too low value and has been mistakenly classified by collectors and exporters as another colour form of brown sandfish. There are several other, less common but still valuable, beche-de-mer species in the Indo-Pacific region (see Guille et al, 1986).

#### References

Cherbonnier, G. (1980). **Holothurians of New Caledonia**. Bull. Mus. Nat. Hist. Nat., Paris, Ser 4, 2A(3): 615-667

Conand, C. (1986). **The fishery resources of the Pacific Islands. Part two. Holothurians**. FAO Fish. Tech. Pap., 272.2: 108pp.

Crean, K. (1977). **The beche-de-mer industry in Ontong Java, Solomon Islands**. SPC Fisheries Newsletter No 15, October 1987, 12pp.

Guille, A., Laboute, P. and Menou, J.L. (1986). **Handbook of the sea-stars, sea-urchins and related echinoderms of New Caledonia lagoon**. Collection Faune Tropicale No 25, ORSTOM, Paris.

SPC. (1974). **Beche-de-mer of the South Pacific Islands**. South Pacific Commission, Noumea, New Caledonia.

SPC. (1979). **Beche-de-mer of the South Pacific Islands. Handbook No 18**. South Pacific Commission, Noumea, New Caledonia.

### Beche-de-mer survey in Tonga

by Garry Preston  
SPC, New Caledonia

A two-week survey of beche-de-mer resources was carried out in Ha'apai, Tonga, by the Tonga Fisheries Division, with the assistance of the South Pacific Commission and the Papua New Guinea Department of Fisheries and Marine Resources. The survey took place during June 1990.

45 SCUBA dives were completed and data gathered about the abundance and distribution of the sea cucumber species in the area. From this it was possible to draw some conclusions about the depth and geographical distributions of the six commercially useful species present.

The total standing stock of commercially exploitable sea cucumbers in water less than 30 m deep in the area was estimated to be about 1.01 million animals, although some of these would be inaccessible to fishermen because of their depth or distance from a land base. It is anticipated that beche-de-mer are also present in significant numbers below this depth but this was not demonstrated: if true, these animals would form an essentially inaccessible broodstock, at least for some species.

It was recommended that the Fisheries Division go ahead with their plan to promote the development of this industry, provided that harvests do not exceed half the total standing stock per year (about half a million animals). At an estimated value of between 1 and 2 Tongan Pa'anga per animal to the processor, this fishery could ultimately be worth between 0.5 and 1.0 million Pa'anga per year to the area.

No management of the fishery is proposed at present since this does not appear to be needed. However, it was recommended very strongly that all possible steps be taken, including implementing new legislation, to prevent or discourage the use of SCUBA gear or other underwater breathing apparatus for sea cucumber collection. It is also recommended that any Fisheries Division-sponsored development work in this fishery should also provide for the collection of basic production statistics to allow monitoring of the way in which the resource is being exploited.