

## Solomon Islands

### Beche-de-mer exports Solomon Islands (1983–1991)

Year	Weight (t)	Value (SIS)
1983	9.26	51,755
1984	44.29	251,872
1985	13.62	74,880
1986	134.18	733,793
1987	146.38	839,533
1988	146.86	1,469,117
1989	87.10	721,236
1990	118.90	1,880,957
1991	622.38	7,631,952

### Local purchase of beche-de-mer by Province (1988–1991)

Province	1988		1989		1990		1991	
	Weight (kg)	Value (SIS)	Weight (kg)	Value (SIS)	Weight (kg)	Value (SIS)	Weight (kg)	Value (SIS)
Unknown			5,276.40	50,563.65	35.30	249.00		
Guadalcanal			281.80	3,105.90	12,630.15	92,321.89		
Malaita	569.21	6,734.97	7,762.90	46,513.62	68,513.40	819,485.09		
Temotu			1,957.50	4,647.39	2,767.90	17,303.11	11,732.80	58,378.38
Western			23,500.64	90,647.27	25,136.80	355,889.60		
Isabel			5,534.50	24,484.47	11,609.85	64,445.24	149.50	702.55
Central			999.10	2,855.09	12,630.15	92,321.89		
Makira			498.60	2,241.89	243.20	1,407.60		

Note: The local purchase figures have been taken under the Solomon Islands licensing system which requires local exporting companies to provide all data related to their trade in marine resources. This data collection system was first implemented in 1988; the coverage of local buyers for 1989 and 1990 is incomplete (30 per cent and 77 per cent respectively)

Source: Fisheries Division, Ministry of Natural Resources, Honiara, Solomon Islands

### Sea cucumbers

*by Walter G. Meyer*  
(Excerpt from an article published  
in *Baja Explorer*, Sept–Oct 1992)

They are disgusting to look at before they're cooked, and even less appetising after boiling. The smell of them cooking would make anyone lose an appetite, and the polite name *sea cucumber* conceals the fact they are more closely related to sea slugs than to any garden vegetable.

But, in the quest to get more food from the sea, the little creatures are fetching top dollars in the Far East (US\$20,000 a ton in Japan) and are becoming a delicacy elsewhere (US\$17 a serving at restaurants in British Columbia). The demand to harvest more is putting political, social and economic pres-

sure on the Mexican Government to increase its export of what it calls 'pepinos del mar.'

The species endemic to the Sea of Cortez, *Isostichopus fuscus*, is much more sought after than its Pacific Ocean counterpart, and in fact accounted for 80 per cent of the sea cucumbers exported last year.

Although it is legal to take sea cucumbers for personal consumption, commercial diving for the animals requires a permit. After four years of commercial exploitation, the Mexican government has begun a study of the *fuscus* population in the Sea of

Cortez to determine how many tons can be taken each year and still leave enough to support a self-sustaining population.

While Lily Romina Salgado Castro of PESCA, the Mexican Department of Fisheries, continues her count and finds far fewer cucumbers than she expected, the government continues to issue permits.

Not much is known about the slow-growing animals which may live 25 years. Salgado advises, 'We

should stop any (commercial) diving activity until we know exactly how many we have, what size, and at what age the juveniles become adults.'

Although diving for the cucumbers is dangerous for both Salgado and those who do it for money, the market value of the strange little species makes it worth the risk. The competition for permits is growing as is the price for the small brown slug. Salgado worries that the cucumber may be fished to less than commercial numbers before her study is even complete.

### Recent publications on beche-de-mer fisheries

by Dr Tim Adams,  
South Pacific Commission,  
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**Review of the beche-de-mer (sea cucumber) fishery in the Maldives**, by Leslie Joseph, Programme Officer, Bay of Bengal Programme (April 1992), 34pp. Document number BOBP/WP/79 of the Bay of Bengal Programme, 91 St. Mary's Road, Abhiramapuram (Post Bag No.1054), Madras 600 018, India, Fax: 044-436102.

This is a brief, but comprehensive review of the beche-de-mer fishery in the Maldives – the extensive island chain to the southwest of Sri Lanka in the Indian Ocean. The species exploited, and the recent rapid rise of the fishery, will sound familiar to South Pacific readers.

The description of the gradual shift from high-value to low-value species since the fishery started in 1986, and the worries that are expressed about economic losses due to poor-quality processing gave me, at least, a strong sense of *déjà-vu*.

As well as a description of the fishery, including export figures, prices, descriptions of processing, a brief economic analysis, examples of catch rates, length frequency histograms, and social consequences, there is a seven-page annex describing the nine major exploited species, with colour photographs of each, either processed or as they appear fresh out of the water.

It may be useful to reproduce the review's recommendations in full:

### Recommendations

*The beche-de-mer fishery in the Maldives, despite its very short history, displays all the signs characteristic of an overexploited fishery. The fact that the trends observed in the islands visited are borne out by the trends derived from an analysis of the export data, shows that they are applicable to the entire archipelago. In the absence of a monitoring mechanism, these signs have not been recognised during a very rapid growth phase. Current levels of exploitation may also hinder future*

*sustainable exploitation of this resource. In order to ensure a long-term sustainable exploitation of the resource, it is imperative to introduce regulatory mechanisms without delay.*

*The following recommendations are made, in the light of available information, for consideration by the concerned authorities.*

(a) *The collection and export of **T. ananas** (prickly redfish) should be suspended for 4–5 years to permit the recovery of the resource.*

(b) *The collection of beche-de-mer using scuba diving should be banned. This will take the pressure off the spawning stocks of the valuable species **T. ananas** and **M. nobilis** (white teatfish) inhabiting deeper waters.*

*(These two measures, when implemented together, may lead to eventual rehabilitation of **T. ananas** resources.)*

(c) *Collection and export of small-sized **H. atra** (lollyfish) should be stopped by imposing a minimum size limit – say above 6" processed.*

(d) *Night fishing for nocturnal species such as **B. marmorata** (brown sandfish) should be discouraged as a first step and then followed by a ban if increased fishing is accompanied by low catches.*

(e) *A data collection and monitoring mechanism should be established for the fishery. It should be possible to collect some basic data on the fishery without too much effort. For instance, the Island Chiefs, or the Government officials responsible for*