

7. BECHE DE MER MARKETS⁴

7.1 General

The bêche-de-mer market is largely controlled by Chinese traders and has been ever since man first developed a taste for sea cucumber in the distant past. The world market is a complex affair; some producing countries are solely exporters whereas in others a resident ethnic Chinese minority consumes part of the harvest. Other countries are basically importers, whether or not holothurians are exploited there. It should also be noted that the same bêche-de-mer may crop up in several markets one after the other, which complicates any analysis of the statistics. An examination of export statistics from producing countries shows that bêche-de-mer may be sent to one or more of the three main markets of Hong Kong, Singapore and Taiwan. Recent trade statistics from these three centres may be used to analyse the present state of the world market and its trends.

As far back as 1917, Hornell based his survey of Indian holothurian fisheries on the Singapore and Penang statistics, providing data on the period from 1907 to 1916. To this information were added statistics from British Malaya, Hong Kong and China by Sella and Sella (1940) for the 1931 to 1933 period. These authors observed the confusion caused by re-exports from one market to another. More recently, Sachithanantan (1972) has analysed Singapore's statistics from 1962 to 1970 and Hong Kong's 1970 statistics. Lastly, some data appeared in an article in 'Australian Fisheries' (1979) for 1978.

This historical data has been supplemented by recent statistics from the Hong Kong, Singapore and Taiwan markets.⁵ They include both import statistics by country of origin, in terms of tonnage and value and re-export statistics broken down by country of destination, also in tonnage and value. As these are not producing countries, their exports are negligible. Despite the inaccuracy these figures may sometimes suffer from, they are at present the best available indicators for attempting to assess the world harvest and monitor its development trends.

7.2 Hong Kong market

7.2.1 History

Hong Kong is today the largest bêche-de-mer market in the world. The way it has developed (Figure 48) can be followed from 1931-33 onwards, for which period Sella and Sella (1940) recorded the average annual import tonnage, approximately 1,315 tonnes, originating in some ten countries, the main ones being Australia, first, followed by the Dutch East Indies and a number of British Empire countries. A small percentage, 10 per cent,

4. This chapter was prepared with the assistance of Mr Van Eys, an international trade analyst with INFOFISH.

5. Sincere thanks are expressed to the people and organisations supplying these statistics.

Table 31:

Examples of commercial grading of *Scabra*.
 n: number of specimens per kg-w: relevant weight
 classification - l: length classification; price indications
 per kg from Infofish 15/11/85, in USD (Us dollars), SGD
 (Singapore dollars), INR (Indian rupees).

PLACE SOURCE ORIGIN	NEW CALEDONIA Exporters				SRI LANKA				SINGAPORE Infofish					
	Grade	n	P(g)	L(cm)	n	w	USD	L(cm)	INR	USD	SGD	L(cm)	INR	USD
Category	A = XL	7-11	140-90	> 13										
	B = L	12-15	85-65	13 - 11.5										
	C = L	16-20	60-50	11.5-10.5	16	62	15.15				32			
	D = S	21-30	45-30	10 - 9	20	50	13.30	> 10	141		28			11.90
	E = ES	31-40	25-20	9 - 7.5	35	28	11.85	9.5-7	113		25			9.50
	F = off	> 40	< 20	< 7	50	20	10.40				22			
					80	12	8.55				18			
					120	8	6.15				13			
					160	6	3.80				8			

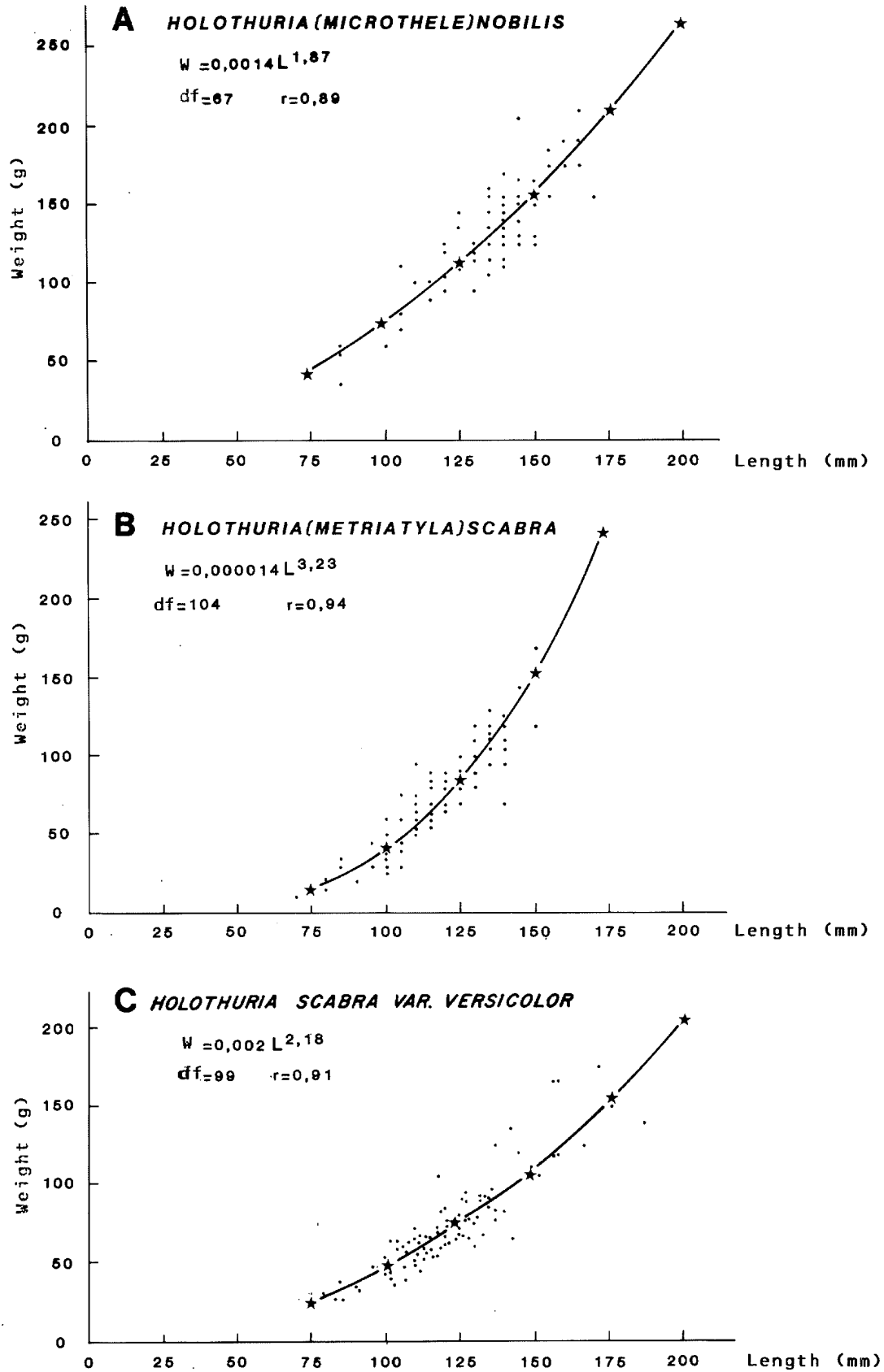


Figure 47: Length-weight relationships of bêche-de-mer processed in New Caledonia. A: *H. nobilis* B: *H. scabra*; C: *H. scabra* var. *versicolor*

Table 32: Commercial grades of teatfish in Singapore
(Source: Van Eys, 1986).

GRADE	MEAN LENGTH		MEAN WEIGHT (g)
	(inches)	(cm)	
1	9	22	250
2	7	18	180
3	5	13	100
4	4	10	70
5	3	8	50

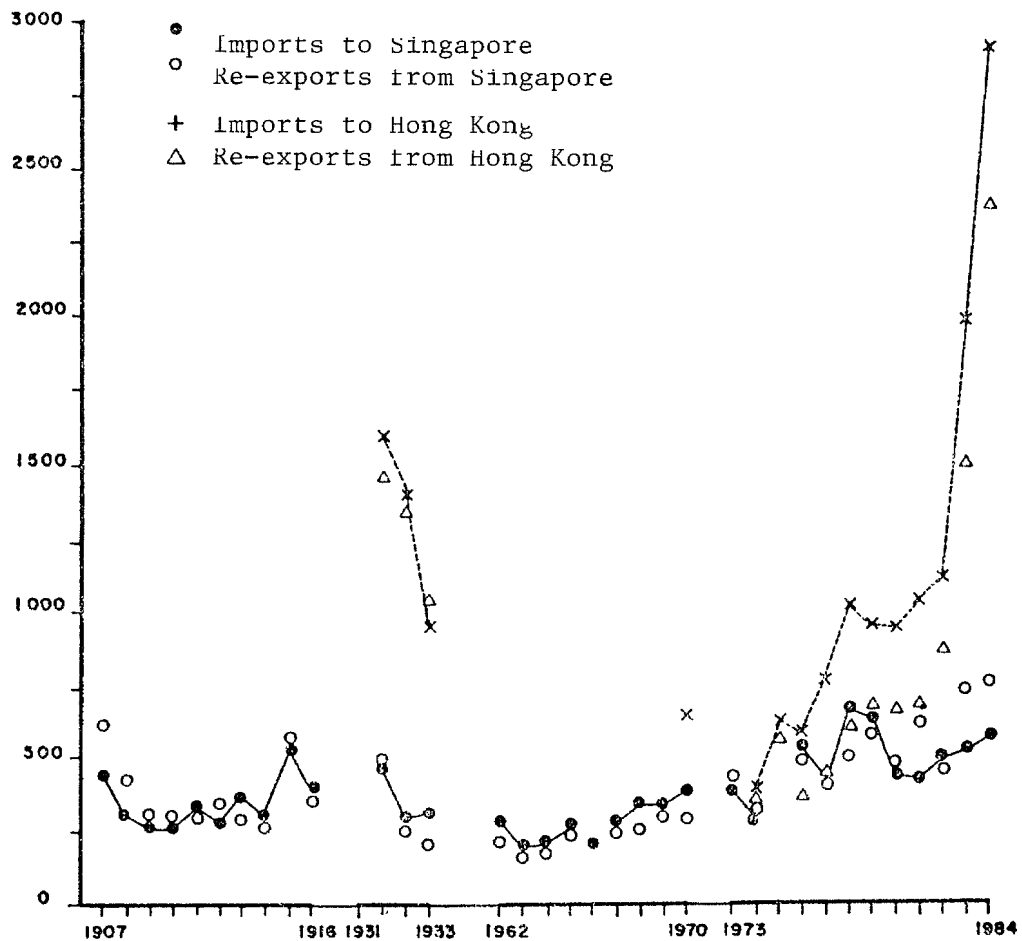


Figure 48: Fluctuations in the Hong Kong and Singapore bêche-de-mer market tonnages.

was accounted for by re-exports from British Malaya (Singapore). During this period, annual imports fell away slightly. Most re-exports, approximately 1,260 tonnes, went to China.

For 1970, only export statistics were reported by Sachithanathan (1972), by which time they were much lower, amounting to only 650 tonnes from various sources. The percentages for the various countries were 43 per cent from Mozambique, 14 per cent from Singapore and 11 per cent from Indonesia. Their total value, US\$656,000, gives an average value of US\$1/kg. These figures varied from country to country; small tonnages from Korea and the USSR, relating therefore to species *S. japonicus*, had a significant influence on the overall value, whereas commodities from the Philippines and East Africa were priced very low.

7.2.2 Recent developments

The available statistics for the last decade were analysed and the main results are recorded in Tables 33 and 34 for exports and re-exports respectively. These relate to tonnages, values in Hong Kong dollars and average value per kilogram, as well as the number of countries of origin or destination with tonnages over 1 tonne, to illustrate the diversity of trading patterns, and over 50 tonnes to highlight the most important countries. For these countries and the grouped countries of the tropical Pacific, the statistics are quoted year by year and expressed in terms of percentages of the annual tonnage and value; the average value per kilogram is also shown.

Historical trends in imports (Table 33) show very clearly that the tonnages, which were very low in 1974 with 405 tonnes, then increased greatly, for the first time in 1978 when they rose to approximately one thousand tonnes. They remained at this level until 1982, when a further very marked increase occurred, tripling tonnages which reached 2,900 tonnes in 1984. This vigorous growth appeared to be continuing in 1985 with more than 3,400 tonnes imported during the first ten months of the year. Values have however apparently not followed the same pattern; the value per kilogram reached its highest level in 1982, at more than HK\$25, but has fallen back over the last two years under the influence of the economic recession. During this period, imports continued to come from diverse origins, some 20 countries altogether, but their respective importance changed. In 1983-84, the Philippines were top of the list, followed closely by Indonesia. These two countries together accounted for over 80 per cent of import tonnages, while tonnages from Singapore diminished. From the value point of view, the Philippines and Indonesia accounted for less than half the total, and the contribution of the Pacific islands was significant because their product is quite a high quality one. The volume of imports increases in December and January, as demand rises with preparations for Chinese New Year celebrations.

Less information is available on re-exports (Table 34). According to the overall annual statistics, these followed import trends, rising to 2,404 tonnes in 1984, worth more than HK\$42 million. The average price was slightly higher for re-exports; reaching a maximum of HK\$28.7/kg in 1980, it dropped to around HK\$18/kg in 1984.

Table 33: Bêche-de-mer imported to Hong Kong, 1974 to 1984

YEAR	TONNAGE T (t)	VALUE v(HKD) 10 ⁻³	VALUE/KG v(HKD)	NUMBER OF COUNTRIES		MAIN COUNTRIES OF ORIGIN							
				> 1t	> 50 t	Philippines %T %v \bar{v}	Indonesia %T %v \bar{v}	Pacific Islands %T %v \bar{v}	Other %T %v \bar{v}				
1974	405	4 229	10,4										
1975	637	7 352	11,5	18	4	10 6 6,9	21 18 5,0	1 2 17,3				Mozambique 15 10 7,98	
1976	570	7 915	13,8	18	5	15 6 6	19 20	4 7 27,1				Kenya 11 11	
1977	770	10 269	13,3	22	5	21 9 5,5	21 19 19,7	8 14 24,0				North Korea 8 15	
1978	1 027	11 684	11,3	21	3	27 14 6,0	23 28 13,7	8 9 10,9					
1979	971	15 380	15,8	16	5	31 19 9,9	23 18 11,8	2 3 19,7				Madagascar 21 17 13,0	
1980	962	20 683	21,5										
1981	1 055	24 868	22,1			37 23 14,7	28 17 14,4	4 7 44,8				Singapore 5 7 31,3	
1982	1 124	28 464	25,3			25 14 13,8	35 19 13,5	5 6 30,2				Singapore 5 6 31,1	
1983	1 998	43 180	21,6	18	3	43 24 12,5	30 25 14,0	3 4 33,6				Singapore 2 4 36,8	
1984	2 905	50 557	17,4	23	4	47 21 7,8	36 26 12,2	5 14 50,2				Singapore 3 9 60,5	

Table 34: Bêche-de-mer re-exported from Hong Kong, 1974 to 1984

YEAR	TONNAGE T (t)	VALUE v (HKD 10-3)	VALUE/KG v (HKD)	NUMBER OF COUNTRIES		MAIN COUNTRIES OF DESTINATION											
				>1 t	>50t	China	Republic of Korea	Taiwan	Singapore	% T	% v	% T	% v	% T	% v	% T	% v
1974	305	3 500	11,8			% T	% v	% T	% v	% T	% v	% T	% v	% T	% v		
1975	468	7 743	16,5														
1976	372	7 005	18,8														
1977	444	9 590	21,5														
1978	621	12 205	19,6														
1979	693	16 911	24,4														
1980	680	19 546	28,7														
1981	693	19 179	27,6	7	4	8	4	12,2	24	9	10,8	28	32	31,0	26	33	35,4
1982	873	24 119	27,6	8	4	23	12	14,4	19	9	13,6	33	40	32,9	14	20	30,9
1983	1 517	31 817	21,0	12	5	61	32	10,6	9	24	16,4	16	7	30,2	8	22	52,6
1984	2 404	42 678	17,8	11	5	68	35	9,0	16	15	16,2	8	14	33,6	5	19	73,6

The role of re-exportation is not solely restricted to commodity shipment. A grading process is often carried out, giving some added value to the products.

Re-export recipients in 1983-84 included a dozen countries, especially China, Taiwan, the Republic of Korea and Singapore. China took over 60 per cent of these tonnages and Singapore ranked fourth, whereas in value terms it lies second after China.

Recent growth in the Hong Kong market has occurred to a background of increased re-exports to China since 1981. For the early months of 1985, these represented 86 per cent of total re-exports. This market consumes a rather low quality product, which could particularly concern the species *Thelenota ananas*.

The difference between imports and re-exports should largely be accounted for by local consumption, which therefore amounts to around 500 tonnes. The fluctuations in monthly tonnages show that re-exports fairly accurately reflect imports, implying a swift turnover.

7.3 Singapore market

The Singapore market is the second biggest in the world for imports and re-exports, but the local retail market is also important. Shops also selling shark fins, birds' nests, air bladders, etc., jostle each other in some Singapore streets, offering bulk or packaged *bêche-de-mer* (Figure 49). The retailers purchase batches of *bêche-de-mer* from the importers at auction, with importers reserving the right not to sell if the bidding is too low.

7.3.1 History

The development of the market may be traced back to the beginning of the century (Figure 48). For the period from 1907 to 1916 (Hornell, 1917), annual imports fluctuated around an average of 360 tonnes, mainly from the Dutch East Indies, British possessions and the Philippines. Exports were consigned, in almost equal halves, to China and Hong Kong. 1907 and 1915 recorded tonnages well over the average. From 1931 to 1933, tonnages declined slightly and re-exports went primarily to China (55%) and Hong Kong (33%).

The 1962 to 1970 period was reviewed by Sachithanathan (1972). There was little in the way of imports, less than 400 tonnes; these came from many countries, those of the Indian ocean in particular, but also from Indonesia and territories of the tropical Pacific. Most re-exports went to Malaysia (80%).

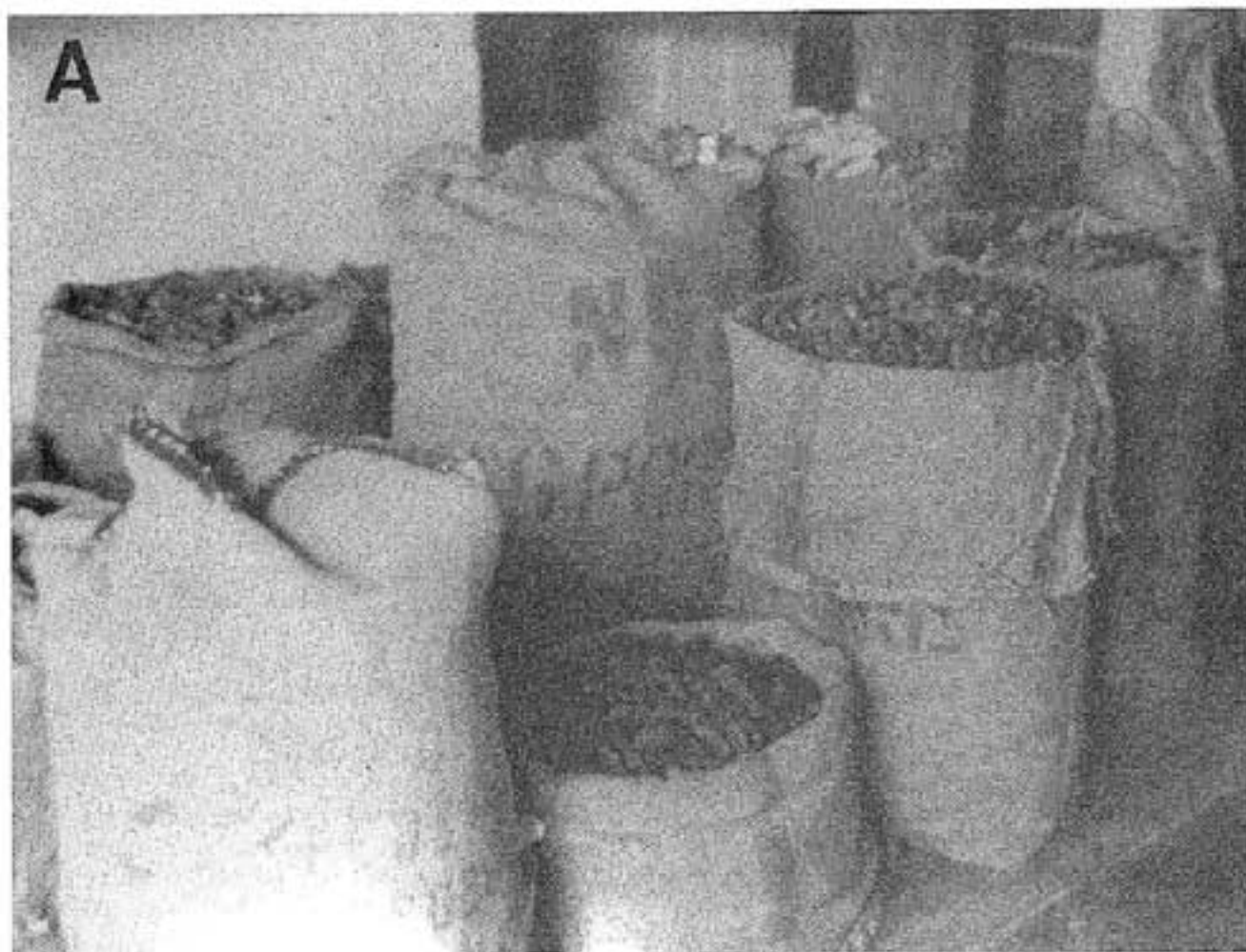


Figure 49: Singapore market. A: sacks of beche-de-mer at a wholesalers; B: teatfish and sandfish at a retailer's (Photos Conand).

7.3.2 Recent developments

Recent statistics, from 1973 to 1984, are shown in tables 35 for imports and 36 for re-exports respectively. A degree of inaccuracy in the import statistics, which sometimes paradoxically appear to be lower than re-exports, may be due to the fact that bêche-de-mer does not attract customs import duty; it is sometimes classified under the heading 'dry seafood'.

Imports were generally following an upward movement during this period despite the slump which followed the particularly busy years of 1978 and 1979. This increase was however much less marked than in Hong Kong, where the average value per kilogram quadrupled and the total annual value multiplied by a factor of five. These imports continued to be of various origins, since in 1983 and 1984, six countries sent tonnages over 50 tonnes to Singapore. Despite variations in countries' relative importance, the Philippines were usually in the top position and countries of the Indian ocean, Sri Lanka and India in particular, provided a substantial proportion of the tonnages imported. The ranking order of the African countries, Kenya, Mozambique and Tanzania, and of Sabah, were highly variable. The countries of the South Pacific exported products of high commercial value. Their market share increased substantially in 1984 with the resumption of bêche-de-mer production in New Caledonia. Philippines' trepang has always attracted a lower price than its Sri Lankan or Indian equivalent.

The volume and value of re-exports (Table 35) have evolved similarly to imports. Three-quarters of the tonnages concerned are, however, destined for one country: Malaysia. Taiwan and Hong Kong are important because their demand is for a high quality product. Small quantities are also sent to Sarawak, the Republic of Korea and Thailand.

Trade between Hong Kong and Singapore consists therefore of an exchange of products by twinned companies for speculative purposes.

7.4 Conclusions

It therefore emerges from the trade statistics that Hong Kong is currently the principal bêche-de-mer market and is showing an upward trend in imported tonnages. These amounted to approximately 3,000 tonnes in 1984 and to 3,500 tonnes for the first ten months of 1985, chiefly from the Philippines and Indonesia. Re-exports were mainly headed for the People's Republic of China and the Republic of Korea.

The Singapore market is not growing so quickly. Its imports, almost 600 tonnes in 1984, originated in various Indian ocean countries but also in the Philippines. Malaysia was the main destination for its re-exports.

A considerable proportion of bêche-de-mer production transits successively through a number of markets, making any evaluation of production a complicated task.

The other main importing countries are therefore the People's Republic of China, peninsular Malaysia and Taiwan.

Table 35: Bêche-de-mer imported to Singapore, 1973 to 1984.

YEAR	TONNAGE T(t)	VALUE v(SD. 10 ⁻³)	VALUE/KG v(SD)	NUMBER OF COUNTRIES		MAIN COUNTRIES OF ORIGIN								
				> 1 t	> 50 t	Sri Lanka		India		Other		Pacific Islands		
						% T	% v	% T	% v	% T	% v	% T	% v	
1973	397	1 324	3,3	15	3	32	54	16	16	25	3	3	7	6,6
1974	319	1 595	5,0	11	2	50	66	28	21		1	1	1	4,6
1976	556	2 497	4,5	12	3	20	43	15	28	47				
1977	428	2 956	6,9	13	4	22	33	18	25	28	1	3	13,0	
1978	670	3 797	5,7	13	3	25	34	5	9	25				8,3
1979	639	4 985	7,8	11	4	29	40	10	17	19				
1980	467	4 896	10,5	10	4	21	35	13	18	15				20,0
1981	446	5 655	12,7	13	4	18	32	20	24	22				11,2
1982	506	6 239	12,3	15	5	13	26	19	19	15				11,8
1983	533	7 129	13,3	15	6	10	20	18	22	18				12,0
1984	500	7 055	12,0	15	6	6	13	10	13	24				15,1

Table 36: Bêche-de-mer re-exported from Singapore, 1973 to 1984

YEAR	TONNAGE T (t)	VALUE v(SD. 10-3)	VALUE/KG v(SD)	NUMBER OF COUNTRIES		MAIN COUNTRIES OF DESTINATION											
				> 1 t	> 50 t	Malaysia		Taiwan		Hong Kong		Other					
						% T	% v	% T	% v	% T	% v	% T	% v	% T	% v		
1973	437	603	1,4	6	1	80	47	0,8	3	2	1,2	3	7	4,1	8	22	4,1
1974	324	658	2,0	6	2	69	35	1,0	15	22	2,9	6	21	7,5	6	12	4,4
1976	501	908	1,8	6	2	78	38	0,9	12	17	2,6	5	23	8,6	3	15	8,4
1977	465	1 121	2,4	6	2	62	29	1,1	25	32	3,0	5	8	3,8	4	15	9,9
1978	515	1 672	3,2	7	2	65	30	1,5	25	41	5,4	1	2	4,7	4	14	11,7
1979	608	3 272	5,4	6	4	52	17	1,7	23	37	8,5	10	29	14,8	10	9	4,9
1980	489	2 185	4,5	5	1	69	28	1,8	10	28	13,7	4	16	15,5	13	14	4,9
1981	630	4 032	6,4	5	2	68	37	3,5	21	42	13,1	7	11	11,1	3	7	15,3
1982	485	3 727	7,7	5	2	64	40	4,8	20	35	13,6	10	15	11,6	3	7	15,0
1983	758	3 488	4,6	7	3	68	50	3,3	15	23	7,3	7	9	6,2	2	9	17,8
1984	779	4 040	5,2	8	3	75	47	3,3	8	16	10,0	10	24	12,2	2	6	15,4

Malaysia's imports are on the increase. Those of Taiwan come from a dozen countries, led by Indonesia, and are falling, perhaps because of the stiff customs duty applicable (Table 37).

The countries and territories of the South Pacific export small tonnages to Hong Kong and Singapore. Their share in either of these markets is usually less than 10 per cent of the annual tonnages concerned, except for Singapore in 1984. Because of the fairly high price which their high quality product attracts, however, their contribution to the total values of imports was 14% in Hong Kong and 17% in Singapore in 1984. It is certainly possible for these products to take a bigger stake in the market, provided that they can supply a consistently high quality product on a regular basis.

A list of importers is given in Appendix III. Advertisements placed by traders seeking bêche-de-mer also appear in the SPC Fisheries Newsletter and in INFOFISH Trade News.

Table 37: Bêche-de-mer imported to Malaysia and Taiwan

YEAR	1978	1979	1980	1981	1982	1983
MALAYSIA	472	317	376	509	752	1083
TAIWAN	722	597			463	421