FOR CIRCULATION :

SUBJECT

BECHE-do-MERINDUSTRY

Perm! U.S. of S.

v. Botton

Mr. Asst. U.S. of S.

Part U.S. of S.

Secretary of State

MINUTES

Previous Paper

I think it will be refficient to real the spice copy of the memo to Hanga in a short despatch suggesting

that if they want fulle information they should affly to the Madias

Got ; vachen or thank . 11.12.23

Yes Kunga

dres 1212.23

# MINISTRY OF AGRICULTURE AND FISHERIES

To amid delay, address all communications to-

P. 0. 1879.



43, PARLIAMENT STREET,
LONDON, S.W. 1. O.C.

December, 1983.

Sir

I am directed to refer to your letter of 27th ult., inquiring whether the Ministry can furnish certain information, relating to the Bêche-de- Mer industry, which is desired by the Governor of Kenya, and I am to transmit, to be laid before the Duke of Devonshire, a memorandum (in duplicate) prepared by the Ministry from the information available on the subject.

I am, Sir,

Your obedient Servent,

The Under Secretary of State, Columnal Office,

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# MINISTRY OF AGRICULTURE AND FISHERIES.

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To avoid delay, address all communications to—
THE FIRMENIES SECRETARY.

7.0. 1079.



43, PARLEAMENT STREET,
LONDON, SWIT DEC 23

10 December, 1923.

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The Under Secretary of State, Colonial Office,

# MINISTRY OF AGRICULTURE AND FISHERIES.

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Between No. P. O. 1879.



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LONDON, SW11. DFC.

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Under Secretary of State,

## GRHERAL.

Beche-de-Mer also known as Trepang is a marine food greatly esteemed by the Chimese. It consists of the dried bedy wall of certain large Holothurians - (animals known in England as Sea-eucumbers belonging to the Zeclogical class of Hebinodermate). The principal commercial species of India & Ceylon is Holothuria seabra (vellai attai or white beche-de-Mer]. Holothuria spinifer or "red fish" is superior but is not abundant. Stiehepus chlorontus (Brandt) is very abundant but the body wall is very thin and the commercial value small. The most valued Australian species is Stichepus variegatus (Semper) with a market value of £130 - £150 per ton. Holothuria scabra is not esteemed in the Malay Archipelago owing to the enormous abundance of tiny spicules in the skin forming a chalky layer which has to be removed and other species are used whose names I am not able to discover.

#### CURING.

An excellent account of the Indian Boche-de-Mer industry is given by Mr. James Hornell (1917) who gives statistics of the exports from India as far as they are available. The average amount experted from 1698 to 1909 was 12,175 lbs. Since 1910 these exports had fallen eff to 2,991 lbs per annum (in-1916). They are usually shipped to Penang. The great increase in exports is due, not to any searcity of the Boche-de-Mer but to the deterioration of the quality. The main curing stations were in the hands of the Chinese who worked on approved methods and produced a satisfactory article. Their trade was cut out by Indian merchants who by careless methods turned out a very inferior article which ruined the trade. The correct method of curing is given in Mr. Hornell's paper; briefly recapitulated it is as follows:-

The animals as soon as possible are put into shellow eauldrons over a fierce fire for about 50 minutes till the animals have shrunk to it their size and give out a scoked ofour. They are then buried in sand mear the water and kept moist by pouring on sea water. Here they remain from 12 - 18 hours till ripe, then they are disintered one by one, the surer running over each with his thumb to loose and dislodge some of the shalky incrustation, and are thrown into tide shallow baskets. When these are half full a curer jumps in and treads out the mean while another throws on sea water this removes the chalky deposit. After a final rinsing they are replaced in the caulfrons with enough sea water to cover them and brought to boiling point. Afterwards they are laid on mats and either dried wholly or partly in the sun or in a smoke house over word masks. The animals eviseerate themselves either before curing or in the estaldron.

In Australia and Malayers the method is different :-

On arrival the Beaberds-Mar are boiled in eauldrons for twenty minutes, then they are taken out split up

longitudinally and exposed to the sun on the ground till most of the moisture has evaporated. The largest specimens are spread open on wooden splints. They are then transferred to a smoke house and laid on there of wire netting and smoked for about 24 hours, the wood generally used is red mangrove. By that time they have greatly shrunk and resemble charred sausages and are ready for market.

Mr. Hornell established a Government curing establishment Tirupalakudi in conjunction with the Chank fisheries. According to his latest "Administrative Report for 1921 - 1922" the factory shows a small profit.

# TRADE.

The principal market for Beche-de-Mer is China and Penag and Singapore appear to serve however as Hongkong. elearing houses for receiving and despatching the products from the Dutch Indies, Borneo, India, etc. According to Hornell, who gives statistics of the quantities and values of the imports and exports from these places, the trade is of considerable importance on the Australian coast. The industry is carried on over a considerable part of the Indian Ocean, Melanesia, Australasia and the Pacific Ocean generally, the Phillipine Islands and Dutch Borneo producing large quantities. The total quantity in 1916 imported for reahipping into Singapore and Penang from India, Australia, Borneo, the Phillipines and many other countries amounted approximately to 508 tone and had a value of about \$221,365 (a dollar - 4/2). The demand appears to be considerable. In French Indo-China a considerable industry is carried on by Chinese.

# MRTHOD OF FISHING.

The animals are gathered by hand by wading in shallow water or diving in deepwater. The largest specimens on the Indian coast are in deepwater.

#### SEASONAL PROTECTION.

I have been unable to ascertain whether any such regulations are in force. There is no mention of them in Hornell's report, there did not appear to be any restrictions necessary as the supply was equal to the demand. Little is known about the reproduction of Holothuridae but some of the tropical species are known to breed throughout the year. number of eggs varies from 5 to several hundreds but the exact limits are not known even in one species.

## LITERATURE.

Clarke, H.C. The Apodous Holothurians. Smithsenian Contributions to Knowledge. Vol. XXXV (No. 1723) (SCT)/90%.

Hornell, J. The Indian Beche-de-Mer Industry - its History and recent revival.

Madras Fishery Bulletin XI Report No.4
for 1917.

Administrative Report for the year

Haras Fisheries Bulletin Vol. XVII. No.1 for 1928.

### APPENDIX

Quantity and Value of "Beche de Mer" obtained in Australia during the ten years 1911 - 1980. Extracted from the official Year books of Australia.

Year.	Quantity.	Value.
1911	323	17,712
1912	450	25,142
1913	625	30,943
1914	531	27,847
1915	770	40,078
1916	513	30,222
1917	684	42,064
1918	468	48,933
1919	<b>30</b> 8	42.721
1980	-	70.898

NOTE: The Beche-de-Mer industry is carried on in Queensland and the Northern Territory.

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