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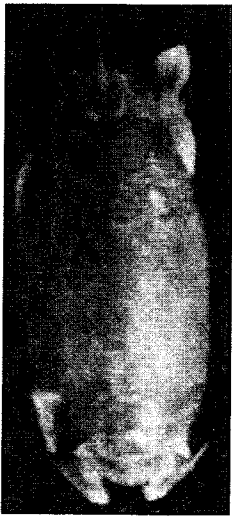
(INDIAN COUNCIL OF AGRICULTURAL RESEARCH)

The Marine Fisheries Information Service : Technical and Extension Series envisages dissemination of information on marine fishery resources based on research results to the planners, industry and farmers and transfer of technology from laboratory to field.

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**Exploitation of sand crabs (*Emerita asiatica* and *Alubunea symnista*)  
as a source of income during the post – tsunami period  
along the Chennai coast, Tamil Nadu**

The sand crabs, *Emerita asiatica* and *Alubunea symnista* belonging to the family



*Emerita asiatica*  
(dorsal view)



*Alubunea symnista*  
(dorsal view)

Hippidae are abundant in the inter-tidal sandy beaches of Olcot Kuppam (Besant Nagar), Thiruvanmiyur Kuppam, Nellankari, Paanaiyur Kuppam, Kanathur Kuppam, Kovalam Kuppam, Mammallapuram and Kalpakkam in Tamilnadu, India. *E.asiatica* is called as “Elli Poochi” or “Nai Eluppa Poochi” in Tamil. Prior to tsunami (December 26<sup>th</sup> 2004) the fisherwomen used to collect them by hand picking during the low tide period after locating the animals by inserting their feet in the loose sand of the inter-tidal region and were sold at a very low price, since the sand crabs are very small containing very little flesh. Usually, the whole animal is ground along with the additives used for preparation of ‘chutney’ a south Indian dish,

as in the case of utilization of dried shrimp for making a variety of “chutneys” in Kerala and elsewhere.

#### Exploitation

After the destruction of fishing crafts and gears by the tsunami – related tidal waves along the Chennai coast and certain other parts of the coastal areas of Tamil Nadu, the fishing activities came to a stand-still for nearly three months depriving the fishing community of their daily earnings. For want of appropriate crafts and gears, the fisherman

increased to 1855 kg in February since more fishermen took part in hand – picking. However, the catch reduced to 504 kg in March. This could be due to the intensive fishing in the previous month, which would have depleted the natural stock of sand crabs. The total income during the three months operations was Rs. 1,99,200/.

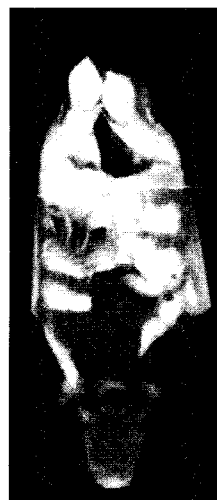
Among the two species of sand crabs, *Emerita asiatica* dominated the catch, forming 81% . It's total length ranged from 36 to 40 mm (males) and 46 to 50 mm(females).

Table 1. Extent of exploitation of sand crabs and the income realized at Olcot Kuppam, Chennai during January – March 2005.

Period	No. of fisherman	Catch		Total income (Rs.)	Av. Income per fisherman/month (Rs.)
		Number	Kg		
January 05	233	1,91,750	1,625	81250	348.71
February	280	2,18890	1855	92750	331,25
March	287	59472	504	25200	87.80
Total	800	4,70,112	3984	199200	(Av)255.92

could not resume fishing for nearly three months. In order to earn a living, the fisherman community at Olcot Kuppam (Besant Nagar) south –east Chennai, resorted to fishing for sand crabs without venturing into the sea during the post-tsunami period of January – March 2005. The details of the catch are presented in Table 1.

A total of 4,70,112 numbers weighing 3984 kg were hand – picked from an approximate inter-tidal area of 50,000 square meters. In January 2005, when the exploitation started, the total catch amounted to 1,625 kg, which



A berried female of *E. asiatica*

The average weights for male and female *E.asiatica* were 6.5 g and 10.5 g. respectively.

Among the females, 50% were found berried. The number of eggs found attached ranged from 4950 to 6,200.

The total length of *Albunea symnista* ranged from 32 to 46 (males) and 30 to 48 mm (females) while the average weight was 4.98 – 6.34 g (males) and 5.03-6.13 g (females).

When the regular fishing resumed in April, the fisherman from this village have resorted to fishing in the sea, indirectly allowing replenishment of the natural stock of sand crabs.

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