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Emergence of thermocole fishing crafts and their economy along Tuticorin coast in Gulf of Mannar

In the recent past thermocole waste materials and sheets were used in fabricating tiny fishing boats and floats of various size and shapes along the Tuticorin coast. Based on the structure they are recognized as floats (poya) and thermocole boats.

During the recent past few fisher folk of Vembar made floating objects by stacking together thermocole packing materials/wastes and used as a fishing platform in the near shore waters. In some cases the pieces are stitched together by nylon twine to have a definite shape. Entire structure is either covered by waste nylon net or waste polysac leaving the upper portion open.

Encouraged by the success of thermocole floats as fishing crafts, thermocole sheets of 10-15 cm thickness are used to replace packing waste for bottom and for the sides. Number of sheets vary depending upon the thickness required. Sheets are joined by stitching. Bottom and sides are supported

either by wooden reapers or bamboo reapers. The reapers are firmly placed with the help of nylon rope stitching. Finally the whole structure is covered with nylon mesh cloth. As a recent improvement provision has been made to drive the thermocole boat with the help of sail along with oar.

Mostly the thermocole floats are employed hand jigging for the exploitation of squids and cuttle fishes. Prior to the introduction of thermocole floats, smaller catamarans of 2.3m in length and 0.5m in breadth with 3 pieces of wooden logs, weighing 40-50 kg were employed in jigging. One motorized vallam used to take 8-10 small sized catamarans to the fishing ground. After reaching the fishing ground each catamaran will be sailed off with one or two persons to a distance of 1-3 km away from the mother boat and operate jigs for squids and cuttle fishes. By this collective operation fishermen could cover a larger fishing area in short time. After fishing they return to the mother boat and then reach the

Table 1. Details of the distribution of thermocole poya and boats along the Tuticorin coast along with the dimensional details

Fishing village	No of units	Length (m)	Breadth (m)	Height (cm)	Weight (kg)	Cost Rs	Gear used	Resources caught	Major catch	Daily earning (Rs)
Vembar	85	2.3-3.5	0.5-0.75	22.-24	8-15	1000-1500	Hooks, Jigs, crab net, lobster net	Cuttlefish, squid, crab, lobster, other fishes	Cephalopods	100-1000
Vellappatti	9	2.5-4	0.5-0.9	20-22	6-12	200-2500	Hooks, Jigs, crab net	Cuttlefish, squid, crab	Crab	100-500
Tuticorin Major harbour	5	2.8-4.2	0.3-0.6	22-24	10-15	1000-2000	Hooks, crab net diving	Cuttlefish, squid, crab, prawn	Crab & chank	100-400
Pazhaya kayal	3	2-3.5	0.5-0.75	20-25	8-15	800-1200	Hand hooks, crab net, prawn gillnet	Squid, crab,	Prawn	100-300
Punnak kayal	4	2.5-3.5	0.5-0.75	22-25	8-15	1000-1500	Hand hooks, gillnet	Crab, prawn, Siganids, catfish	Catfishes	100-500
Kayal patnam	3	2.5	0.5-0.75	22-25	10-15	100-1500	Hand hooks, gillnet	Cuttlefish, squid, crab, lobster, other fishes	Lobster, crab	100-700

shore. Hence the catch and the revenue realized is multifold. Now in Vembar fishing village most of the mini catamarans were replaced by thermocole. Being cheap with a life of nearly two years for such boats similar trends are now seen in other fishing villages

of Tuticorin coast.

Preliminary survey was conducted to find out the total number of thermocole boats operating along the Tuticorin coast and their economic viability. The results are presented in Table 1 along with other dimensional details.

These crafts are beach landed types like catamarans. The added advantage is that the boat can be managed by single man. They are operated in inshore waters up to 10 km. and also withstand high tide waves and currents. These crafts does not incur any operational cost. These crafts would be more

ideal for hand hook operation around artificial reefs to be deployed in the inshore waters of Vembar shortly.

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