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केन्द्रीय समुद्री मात्स्पिकी CENTRAL MARINE FISHERIES अनुसंधान संस्थान RESEARCH INSTITUTE कोचिन, भारत COCHIN, INDIA

> भारतीय कृषि अनुसंधान परिषद INDIAN COUNCIL OF AGRICULTURAL RESEARCH

ON THE RECENT INTRODUCTION OF OUTBOARD ENGINES ALONG THE COROMANDAL COAST*

Fishing crafts fitted with outboard engines were first introduced along the Kerala coast in 1980. High capital investment without financial assistance from government or other financial institutions was one of the main constraints which prevented the introduction of outboard engines along the Coromandal coast. Recently, some of the nationalised banks are extending facilities to fishermen to purchase the engines, as a result of which outboard engines have made their appearence in some of the fish landing centres along the Coromandal coast of the Chengelpet- Tanjore districts. A study was conducted on the introduction of outboard engines along this part of the Coromandal coast and Pondicherry and the results are presented below.

A total number of 232 outboard engines have been introduced at 16 fish landing centres in the South Arcot District, maximum being in Pudupettai, Pudukuppam and Samiyarpettai (Table 1). The 189 engines available at Chengelpet District are distributed in seven landing centres bordering the Pulicat lake the highest number being at Arangamkuppam, Koonankuppam and Tirumalainagar centres. Observations made in 16 landing centres of the Tanjore District revealed the presence of 48 engines in eight centres. All

the three engines introduced along Pondicherry coast are confined to Vaithikuppam centre where they are fitted to small wodden carft of 7-8 m length operating exclusively drift gill nets. No outboard engines have so far been introduced along the coast of Madras District.

The outboard engines are fitted exclusively to catamarans with a length range of 8-10 m operating mainly gill nets, *Pannu valai* and *Mani valai* and the encircling bag-net, *Eda valai*. A permanent iron structure fixed firmly at the rear end of one of the logs of the catamaran accomodates the outboard engine (please see Figs. 1-5).

The catches of the outboard engine - fitted catamaran units are same as that of the non mechanised units. The gill nets landed mackerels, croakers, carangids and prawns and Eda valai landed oil sardine, mackerel, scads and mullets.

All the outboard engines introduced in the Chengelpet-South Arcot districts are Greaves-Modal 3525 LT-OBM with 7 HP, manufactured by Greaves Cotton Co. Ltd. Aurangabad. The engine weighs about 80 kg and the diesel tank capacity is 4.5 litres. Six nationalised banks besides the

Table 1. Particulars of the introduction of outboard engines in various coastal zones along the coastal Chengelpet Tanjore Districts and Pondicherry

Coastal zones Districts (landing centres from north to south)		Districts	Total number of landing centres	Number of centres having outboard engines	Total number of outboard engines
TN 1 -	Koonankuppam-Odaikuppam	Chengelpet	25	7	189
TN 2 -	Pudumenikuppam-Tiruvonmiyur- kuppam	Madras	. 12	-	
TN 3 -	Kottivakkamkuppam-Deveneri and Salavankuppam	Chengelpet	18		_
IN 4 -	Mahabalipuramkuppam-Alam- barikuppam	Jonengerper	21	-	· –
IN 5 -	Muthukadukuppam-Sothnaikuppam	South Arcot	21	- .	_
TN 6 -	Talamkuda-Thandavarayan cholapattinam	\	27	16	232
r. 5. P] Kanakachettikuppam-				
r. 6. P	Murthikuppam	Pondicherry	15	1	3
TN 7 -	Pazhayar to Chinnangudi	Tanjore (part)	16 .	. 8	48

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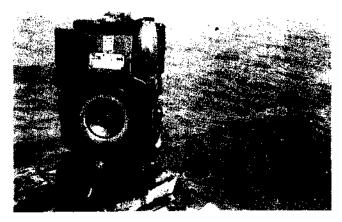


Fig. 1. The outboard engine usually fitted to the catamarans.

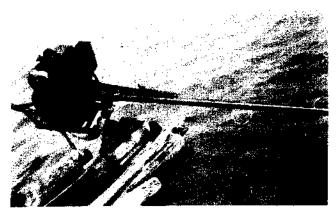


Fig. 2. Side view of the engine with propeller shaft.



Fig. 3. The permanently fixed iron frame on one of the planks of the catamaran for fitting the outboard engine.

District Co-operative Bank in South Arcot District and the only nationalised bank at Pulicat in Chengelpet District finance the fishermen to procure the outboard engines.



Fig. 4. An outboard engine is being removed from a catamaran after fishing operations.



Fig. 5. Outboard engines in the removed condition after fishing operations.

The market value of the outboard engine is about Rs. 20,000/- and a subsidy of 37.5% is granted by the Tamil Nadu government to help purchase. By remitting one third of the cost of engine after adjusting the subsidy amount and fulfilling the necessary requisites, the concerned banks extend loan to fishermen to purchase the engine and the remaining amount is payable in monthly instalments with the interest thereon.

The outboard engines, a recent introduction after May, '90 in two landing centres, Arangamkuppam and Pudupettai, with six numbers to begin with, have soon become popular and at present 472 outboard - engine fitted catamarans are operating in 32 landing centres along the Coromandal coast. Since most of the fishermen are very much interested in acquiring the engines, especially along the South Arcot District, the number of crafts fitted with them is expected to increase considerably in future with the expansion of the traditional fisheries sector.