



# समुद्री मात्स्यकी सूचना सेवा MARINE FISHERIES INFORMATION SERVICE

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केन्द्रीय समुद्री मात्स्यकी CENTRAL MARINE FISHERIES  
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## LONG LINING FOR DEEP SEA SHARKS AT MALPE — A LUCRATIVE FISHERY\*

### Introduction

Recent introduction of long lining for deep sea sharks at Malpe Kolam by some enterprising fishermen from Kerala (mostly from Trivandrum District) met with considerable success. This is particularly significant at a time when there is no scope for further expansion of trawl or purse seine fishery along this coast. Moreover, this diversification of fishing effort for the exploitation of the unexploited resources of the deep

sea sharks of the inshore and offshore waters of the South Kanara coast is a new development. Around 100 long liners are operating from Malpe Kolam landing centre and in each unit 5-7 fishermen are engaged. The present account deals with some of the aspects of this potential new resources.

### Craft and gear employed

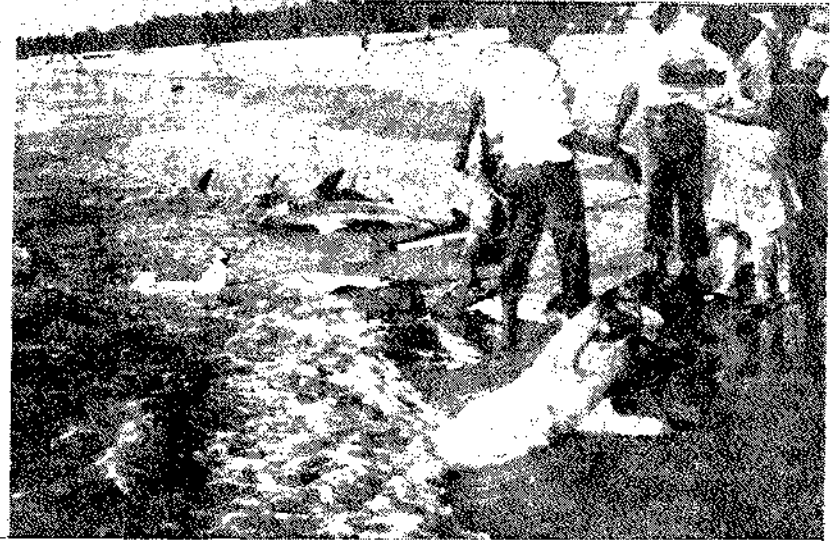
Plank built boats of 30 feet length fitted with 47 HP engine are generally employed in long lining. A few larger boats are also used. The fishing gear involves a long length of line (made of thick nylon rope), often a few kilometres, to which shorter length of line carrying

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1. A long line kept ready on board to set out for fishing. A hook is shown to indicate the size.



2. A long line catch brought ashore for auctioning.



3. *Carcharinus sorrah*-measuring 273 cm in total length (the largest specimen ever measured) landed on 3-11-1988 at Malpe Kolam.



4. *Sphyrna lewini* - measuring 205 cm in total length.

baited hooks are attached every 20-25 metres. There will be 200-250 hooks in a line. The hooks made of steel are single barbed (No. 30) (Photograph 1). Apart from the boat, the total expenditure involved in fabricating a long line may be around Rs. 25,000/-

#### Mode of operation

Generally, each unit may set out for fishing in the evening on a particular day and returns on the following day with the catch. If a unit fails to get any catch, it may continue to stay in the fishing ground for a day or two until it gets some catch. Fishing is done mostly during night at a depth of above 100 m off Malpe.

The fish are attracted by the bait (tuna and dolphin are cut into small pieces and used as bait) and hooked. Catches are generally brought aboard the boat before they leave the fishing ground. On reaching the landing centre all the fishes are tied together and left in the sea near the shore until they are auctioned (Photographs 2-3).

The season starts in September and lasts till May with peak catches obtaining during November-December.

#### Catch details

Month-wise catch details are not available. However, it is roughly estimated that around 2,000 t of deep sea sharks have been landed during 1987-'88 with peak catches during November-December.

#### Important species caught

The catch mainly consisted of the following species:

- i) *Carcharinus sorrah* - Spot tail shark
- ii) *Carcharinus melanopterus* - Black tip reef shark
- iii) *Sphyrna lewini* - Scalloped hammerhead

Among them, *Carcharinus sorrah* is the most common species followed by *Sphyrna lewini*. *Carcharinus melanopterus* occurred in stray numbers. The length measurements taken on 28-10-1988 and 3-11-'88 are given in Table 1.

#### Return

If the catches are good, the return per trip goes up to Rs. 30,000 per unit.

**Table 1.** The size measurements (in cm) of different species identified along with the maximum size recorded.

Species	Male (cm)	Female (cm)	Maximum size previous record (cm) (FAO)
<i>Carcharinus sorrah</i>	139 (25)	248 (90)	150
	134 (25)	161 (35)	probably 230
	136 (25)	161 (35)	
	238 (65)	215 (50)	
		220 (50)	
	229 (60)		
	199 (50)		
	273 (100)		
<i>C. melanopterus</i>		199 (50)	attains 200
<i>Sphyrna lewini</i>	205 (45)	215 (50)	420
	185 (60)	255 (70)	common
			360
		227 (75)	
		225 (75)	

Approximate weight in kg is given in bracket.

Largest specimen measured underlined.

#### Utilization

Generally each shark is auctioned separately on the beach. A shark of about 100 kg may fetch anywhere around Rs. 800. The fish is salted and sent to Kerala where it is sold at Rs. 15-20 per kg. The liver of the shark is boiled in large iron trays on the beach itself for extracting oil. The liver from a shark weighing 50 kg may yield 2-3 litres of oil. The oil extracted from the liver is supplied to some pharmaceutical firms at Kottayam, Alleppey and Alwaye in Kerala. The oil may fetch around Rs. 16/- per litre. Fins are dried and exported to Japan. It may fetch an exorbitant price of Rs. 500-800 per kg.

#### Problems and prospects

Since most of the commercially important resources like prawns, oil sardine, mackerel etc. of the inshore areas are over-exploited, there is no further scope for increasing the effort in this area. Additional production could be achieved only by extending the fishing effort