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NYLON MADE SHORE SEINE TO CATCH MORE FISH*

Introduction

Koprivanipeta and Mulapeta are two important marine fish landings centres in East Godavari District in Andhra Pradesh. A common shore seine used here for catching the nearshore fishes is the 'Pedda alivivala' made of cotton twine. Recently transparent nylon twine has been introduced here to fabricate this gear. The nylon made shore seine has been found to catch more fish besides having several advantages over the cotton net. The light weight of the net facilitates easy operation and handling. This has also reduced the time required for operating the net. In this way the fishermen could increase the number of hauls which means more catch. The use of transparent twine makes it invisible to the fish and therefore very little fish tend to escape from the net. The fishermen can save time required for drying the net.

The newly introduced nylon shore seine is in operation along this coast from September, 1986. By the end of the year there were about seven nets of the above type at Koprivanipeta and 14 at Mulapeta. The new net is getting popularised in the neighbouring centres also.

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Description of gear

The 'Pedda alivivala' consists of 61 webbed pieces laced together, each piece being of different dimensions (Fig. 1) to give an almost tapering finish to the net from the centre to both ends. The dimensions of each piece of the webbing are given in Table 1. A large marker buoy is attached to the centre piece for locating the net in water.

Round cement sinkers numbering 2,500, each one having a diameter of 80 mm and thickness of 20 mm are attached to the foot rope. Synthetic cylindrical floats numbering 100, each one having a diameter of 40 mm and a length of 115 mm, are attached to the head rope. The head rope is formed of two ropes; the float line and the mounting line. Similarly the foot rope also has two ropes the sinker line and the mounting line. Two wooden sticks of 50 cm length are tied to each end of the foot and head ropes (Fig. 1).

The webbing has three typical mesh sizes *i. e.* 14 mm (from pieces 1-10 and centre piece), 22 mm (from pieces 11-25) and 24 mm (from pieces 26 to 30). Each piece has a uniform length of 16.20 m except the centre piece which is 21.60 m. There is a gradual tapering from

Table 1. The dimensions of different webbed pieces on either side of centre webbed piece

Serial number of pieces from either side of centre piece	Width (in m)	Length (in m)	Mesh size (in mm)
Centre piece	15.75	21.60	14
1st piece	13.50	16.20	14
2nd piece	13.05	16.20	14
3rd piece	12.60	16.20	14
4th piece	12.15	16.20	14
5th piece	11.70	16.20	14
6th piece	11.25	16.20	14
7th piece	11.80	16.20	14
8th piece	10.35	16.20	14
9th piece	9.90	16.20	14
10th piece	9.45	16.20	14
11th piece	9.00	16.20	22
12th piece	8.55	16.20	22
13th piece	8.10	16.20	22
14th piece	7.65	16.20	22
15th piece	7.20	16.20	22
16th piece	6.75	16.20	22
17th piece	6.30	16.20	22
18th piece	5.85	16.20	22
19th piece	5.40	16.20	22
20th piece	4.95	16.20	22
21st piece	4.50	16.20	22
22nd piece	4.05	16.20	22
23rd piece	3.60	16.20	22
24th piece	3.15	16.20	22
25th piece	2.70	16.20	22
26th piece	2.25	16.20	24
27th piece	1.80	16.20	24
28th piece	1.35	16.20	24
29th piece	0.90	16.20	24
30th piece	0.45	16.20	24

the centre to either end (Fig. 1) and therefore the width of each piece varies from 15.75 m for the centre piece to 0.45 m for the end piece. The total length of the shore seine is 507.6 m. The operation of this net is similar to any other shore seines and it lasts for 2.5 to 3 hours. The fishing is done in depths of 8-10 m.

The fishes caught in this gear include pelagic fishes namely *Sardinella* spp., Mackerel, *Stolephorus* and other clupeids and carangids. Silver bellies and penaeid prawn like *Metapenaeus dobsoni* are also caught. The shore seine operations start at the two landing centres by September and lasts till April with peak landing during October to March when the sea is calm.

At the time when the gear was introduced in September, 1986 its cost was about Rs. 88,300 which could be split up as under:

Webbed nylon twine	
@Rs. 160/- per kg	: Rs. 62,400 for 390 kg
Nylon rope for foot and head ropes @ Rs. 45/- per kg	: Rs. 11,250 for 250 kg
Nylon rope for warp (25mm diameter) @ Rs. 30/- per kg	: Rs. 6,000 for 200 kg
Synthetic floats @ Rs. 25/- per float	: Rs. 2,500 for 100 floats
Cement weight	: Rs. 300 for 2500 sinkers
Miscellaneous	: Rs. 2,850
Labour charges	: Rs. 3,000
Total	: Rs. 88,300

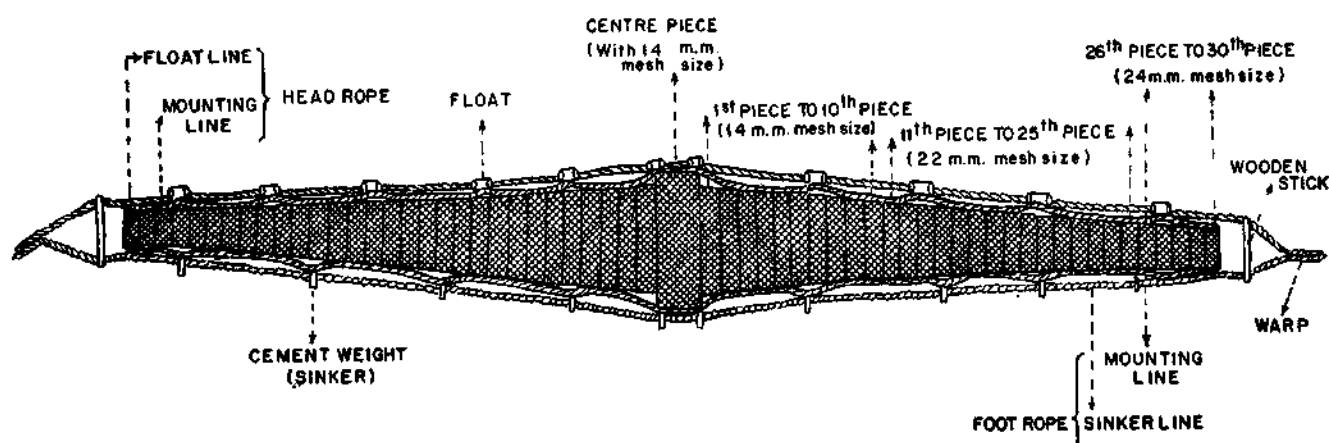


Fig. 1. The 'Pedda alivala' the new nylon shore seine used along the Andhra coast.