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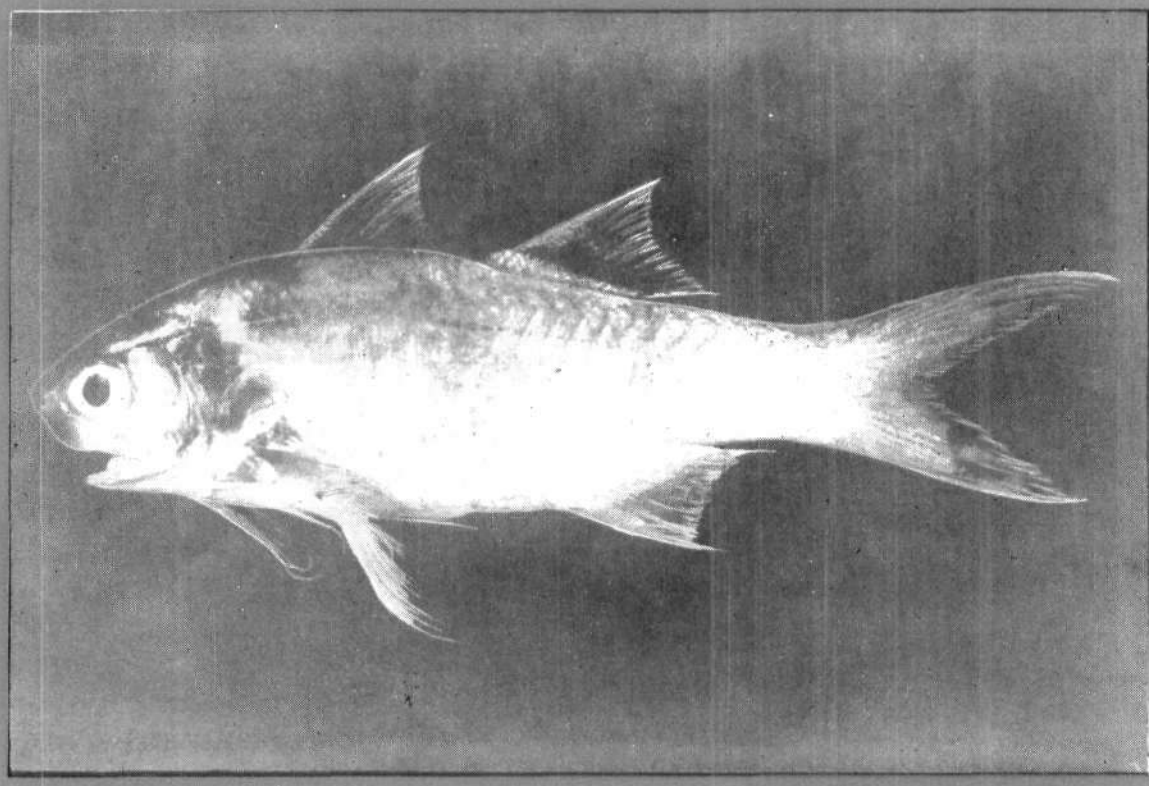

No. 86
AUGUST 1988

Technical and Extension Series

CENTRAL MARINE FISHERIES RESEARCH INSTITUTE
COCHIN, INDIA

INDIAN COUNCIL OF AGRICULTURAL RESEARCH

INTRODUCTION OF 43 FOOTER MECHANISED BOATS FOR COMMERCIAL TRAWLING ALONG THE COAST OF ANDHRA PRADESH*

Along the coast of Andhra Pradesh commercial fishery started in 1964 with small mechanised boats ('pablos') and subsequently in a short period of three years two more types of boats ('Royya' and 'Sorrah') were introduced. Since then, these three types of boats were engaged in fishing in the region without any modification. Among these three types, the 'Royya' category is most dominant in the fleet. Recently, in January, 1988 another type of 43 footer boat popularly known as 'Sona' (Fig. 1) was added to the existing fleet. Out of fifty boats constructed at Kakinada by private boat builders, 30 boats are registered at Visakhapatnam and they have been conducting fishing there. On enquiry with boat-owners and boat-builders, it is understood that these boats are introduced to conduct fishing for about 15 days. Use of 43 footer vessel for commercial fishing is new to the northeast coast. Therefore the details of boat and the catch obtained are given in this note. The particulars of the boat and engine are shown in Table 1 and those of the nets used along with those

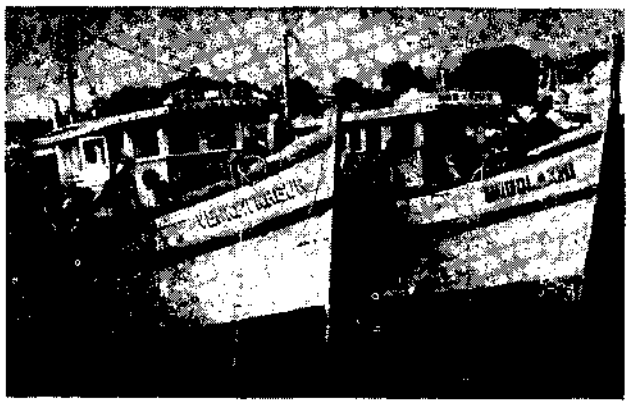

Fig. 1. A view of two 'sona' boats moored at the Kakinada Fisheries Harbour.

already in use by existing boats are shown in Table 2. The catches of those boats already fishing in this region are compared with those of 'Sona' boats (Table 3).

The introduction of costly bigger boats in the commercial fleet at a time when most of the resources in the presently fished areas have reached MSY levels appears significant. The introduction of these boats is primarily to go for fishing for a period of 10–15 days without returning to the base daily thereby cutting expenditure on oil. The information on depth of operation and the catches obtained during January – March period shows that unlike the smaller boats these boats

Table 1. *Specifications of 43 footer boats newly introduced along AP coast*

1. Name of the boat	:	'SONA'
2. Place of construction	:	KAKINADA
3. Dimensions of the boat		
a) Length	:	13.1 m
b) Beam	:	4.1 m
c) Draught	:	2.8 m
d) Depth	:	2.0 m
e) Speed	:	9 km
f) Endurance	:	15 days
4. Tonnage of vessel		
a) Gross tonnage	:	18
b) Net tonnage	:	5.5
5. Materials		
a) Type of material	:	Teak wood
b) Quantity of material required	:	800 cubic feet
c) Cost of the material	:	Rs. 220/- per cubic foot
6. Type of construction	:	Carvel
7. Type of protection for under water surface of hull	:	Fibre glass & aluminium sheeting
8. a) Type of engine	:	Ashok Leyland
b) Horse power	:	102
9. No. of persons can be accomodated	:	9
10. Winches	:	1 mechanical winch with GI wire rope
11. Capacities		
a) Fish hold	:	Nil (6 fibre-glass tanks with ice)
b) Fresh water capacity	:	2,000 litres (F. tanks)
c) Fuel capacity	:	5,000 litres
12. Cost of the boat	:	Rs. 8 lakhs
13. Navigational aid	:	Compass
14. Communication system	:	Nil
15. Life of the boat	:	15–20 years (approximately)

* Prepared by K. Chittibabu, P. Ramalingam, K. Dhanaraju, and T. Nageswara Rao, Kakinada Research Centre of CMFRI, Kakinada.

are fishing in relatively deeper areas (Table 3). The catches and catch rates, however, do not seem to be better than those obtained by the boats already existing. However, collection of data on the effort, catch, species composition from these newly introduced boats together with information on economics of operation for at least a period of 1-2 years can only help to understand the economic viability of these boats in the present context of shrimp oriented trawling. Since it is known that certain important fin-fishes like thread-fin breams are abundant in relatively deeper waters of 75–100 m depth, deployment of bigger boats to fish in these areas appears reasonable. This will help in exploiting the under-exploited areas while allowing the smaller boats to continue to fish in the presently fished areas. Further, almost the entire mechanised fishing industry along Andhra coast is concentrating only in bottom trawling. It is believed that a beginning can be made for mechanised gill netting in deeper areas and purse-seining particularly in view of the increasing demand for quality fish.

Table 2. *Details of craft and gear used at Kakinada*

Particulars of the vessel					Particulars of the gear operated					
Type of Boat	Length (m)	Beam (m)	Draught (m)	Engine (H.P.)	Type of net	Length of head rope (m)	Mesh size (cm)	Otter boards	Rigging	Net operation
Pablo	9.14	2.49	0.87–0.97	40–45	4-beam trawl made of synthetic mono-filament of 0.5–1.0 mm diameter	11.89 & 12.95	Wings: 6–7.5 Body: 3.8–4.5 Cod end: 1.5–2.0	Rectan-gular 35 kgs	Double expanded legs upto a length of 5–10 m	Mecha-nical winch with G.I. wire rope
Royya	9.75 & 10.0	2.9	1.07	45–60	–do–	14.94, 16.5 and 18.29	–do–	40–45 kgs	–do– upto a length of 15–20 m	–do–
Sorrah	11.4	3.2	1.25	60–80	–do–	–do–	–do–	45–60 kgs	–do– upto a length of 10–20 m	–do–
Sona	13.1	4.1	2.8	100–120	–do–	20–22	Wings: 6–7.5 Body: 3.8–5.2 Cod end: 2.5–3.0	60–80 kgs	–do– upto a length of 15–25 m	–do–

Table 3. *Fishing details of various types of boats*

Type of Boat	Number of boats operated	Trawling hours	Av. depth of operation (m)	Average catch per boat (kg)	Catch per hour (kg)	Average catch of shrimp per boat (kg)	Catch of shrimps per hour (kg)
			January, 1988				
Sona	4	200	45	3,621	72.4	789	15.8
Sorrah	228	3,632	25	717	45.0	166	10.4
Royya	2,144	29,164	20	550	40.4	127	9.3
Pablo	204	2,056	20	269	26.7	72	7.2
			February, 1988				
Sona	36	2,439	42	1,972	29.1	399	5.9
Sorrah	234	3,108	25	593	45.0	121	9.1
Royya	1,704	18,514	20	325	30.0	98	9.1
Pablo	152	914	15	150	25.0	65	10.8
			March, 1988				
Sona	47	1,527	45	1,471	45.3	271	8.4
Sorrah	229	2,651	25	430	37.1	72	6.3
Royya	1,988	18,433	20	365	39.3	62	6.7
Pablo	236	1,418	10	167	27.8	35	5.8
			Average for three months				
Sona	29	1,389	44	1,777	37.1	348	7.26
Sorrah	230	3,130	25	580	42.7	120	8.8
Royya	1,945	22,037	20	421	37.2	97	8.5
Pablo	197	1,463	15	198	26.7	56	7.5

Edited by Dr. K. J. Mathew, Mr. I. David Raj and Mr. G. S. D. Selvaraj. Published by Dr. K. J. Mathew on behalf of the Director Central Marine Fisheries Research Institute, Cochin-682 031. Printed at PAICO, Cochin-31.