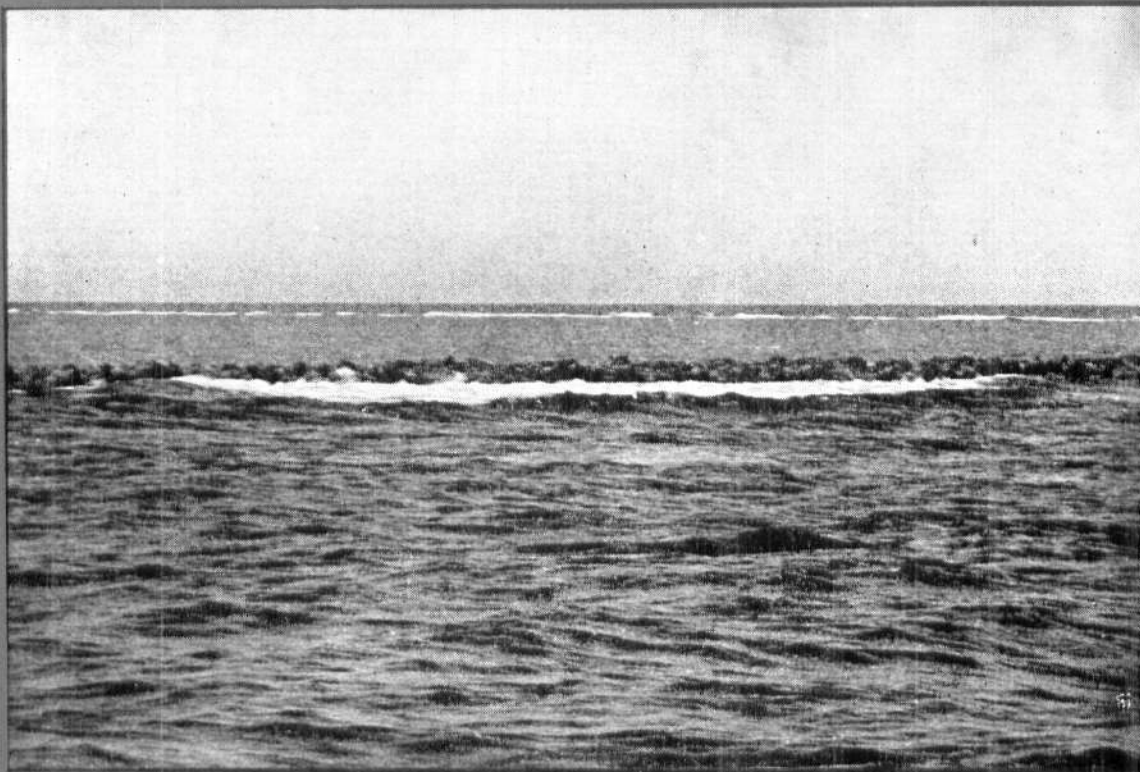




# MARINE FISHERIES INFORMATION SERVICE



No. 77

NOVEMBER 1987

*Technical and Extension Series*

CENTRAL MARINE FISHERIES RESEARCH INSTITUTE

COCHIN, INDIA

INDIAN COUNCIL OF AGRICULTURAL RESEARCH

## INTRODUCTION OF MECHANISED-CUM-SAIL CRAFTS AT KAKINADA\*

Kakinada is one of the important mechanised fish landing centres of Andhra Pradesh. Fishery resources from inshore waters off Kakinada have been traditionally exploited by indigenous crafts, *ie.* 'Navas' (plank-built boats). At present these 'Navas' cover only the nearby fishing grounds. Recently mechanisation of the fishing vessels is being taking place along this coast and this has resulted in increase of catches and thereby better income for the fishermen. These motorised beach-landing crafts conduct fishing at distant fishing grounds at depths ranging from 70 to 90 metres using synthetic drift gill nets of larger meshes. These fishing crafts are built by new construction material – the fibre glass. These beach-landing crafts are without keel and therefore flat-bottomed. They have long fore-deck and short stern deck. They are usually painted red and this colour helps their identification in the sea. The boats are fitted with in-board two cylinder diesel engines of 10 H.P. Generally the weight of the engine is 115 to 120 kg. The air cooled or water cooled engine is fitted at stern of these boats. The length of the boat is 8.45 metres, beam 2.27 metres, depth 0.828 metres and draft 0.45 metres and has a gross tonnage of 2.5 tonnes. There is no gear system to reverse the boat. Fuel tank is

fitted at one corner very near to the engine. A mast and sail are provided in this craft as reserve, and are used whenever the engine fails.

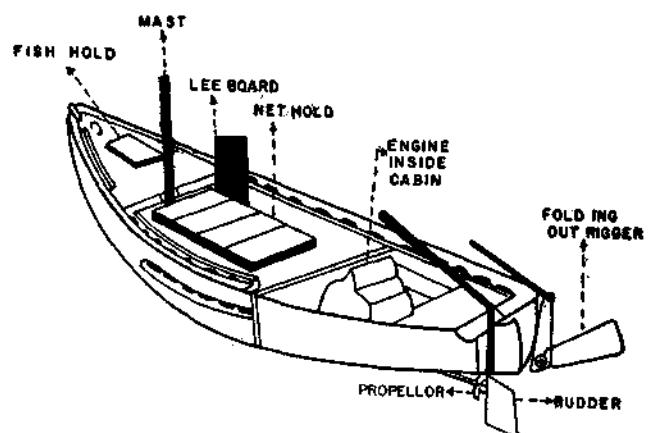


Fig. 1. A mechanised-cum-sail craft operating at Kakinada.

The craft is very economical as it requires very less repairs and maintenance. These crafts are manned by four persons. It does not require any jetty or wharf facilities to land. There is a fish hold to keep the fish caught and a net hold to keep the nets at the longer fore-deck. There are some arrangements of folding

\*Prepared by C. V. Seshagiri Rao, Kakinada Research Centre of CMFRI, Kakinada.

out-rigger (balancing) board and a straight lee board to manage the large sail during sailing. Durability of hull is longer when compared to the materials of other boats. The local boat building yard of Andhra Pradesh Fisheries Corporation at Kakinada is constructing these beach-landing crafts. They issue these boats to marine fishermen under Small Farmers Development Agency (S.F.D.A) on 50 percent subsidy scheme.

These beach-landing crafts leave the landing centre daily during afternoon and return the next day morning. Fuel consumption of the engine is at the rate of 1.5 litres per hour. Usually the running time of the engine is 6-8 hours for to and fro fishing trips. The average speed is 8 to 10 kilometres per hour.

Some of these motorised beach-landing crafts are regularly operating at Subbammipeta, Godarigunta, Kondalupeta, Kotha, Kakinada, Parralopeta, Dummulapeta, Yetimoga, Pagadalupeta and Uppulanka. In the lean season some of these crafts are taken to other places namely, Bhairavipalem, Rameswaram, Vadalarevu of East and West Godavari districts and Machilipatnam area and Puri, Paradeep and other places in Orissa State.

*Synthetic drift gill net:* These motorised beach-landing crafts conduct night fishing using synthetic drift gill nets with larger mesh sizes. The total length of these drift gill nets varies from 1000 - 1600 m and 9 m in height. Generally 45-75 webbed pieces are plied together. Round cement sinkers and cylindrical synthetic floats are used to keep the net vertical in water.

The entire net is fabricated from No. 5 or 6 dark blue multifilament twisted twine.

These motorised crafts operating synthetic drift gill nets land mainly large sized pelagic fishes such as seer fishes, tunas, pomfrets, cat fishes, elasmobranchs, carangids, thread fins and other fishes in order of their abundance.

Sometimes the fishermen operate these gill nets as bottom set gill nets using more number of cement sinkers to catch demersal fishes.

At the time when the motorised beach-landing craft was introduced at Kakinada during June, 1986, its cost was about Rs. 1,23,600. The price details are as follows:

|   |     |                 |
|---|-----|-----------------|
| Cost of boat fitted with engine and its accessories | Rs. | 1,22,000        |
| Cost of canvas sail                                 | Rs. | 1,000           |
| Cost of iron anchor                                 | Rs. | 150             |
| Cost of 4 small oars                                | Rs. | 100             |
| Cost of miscellaneous items                         | Rs. | 350             |
| Total   | Rs. | <u>1,23,600</u> |

The drift gill net fishery with motorised crafts has proved highly profitable due to the increase in quantity and quality of fishes caught. The increased speed and accessibility to the distant fishing grounds are other factors responsible for this higher income.

