

ON AN EXPERIMENTAL FISHING AT 'SWATCH OF NO GROUNDS' IN THE BAY OF BENGAL

Practically no information is available regarding the fishery resources of 'Swatch of no grounds'. On 14th February 1962, an experimental trawling with Haddock type otter trawl was attempted during one of the cruises of M. V. *KALYANI-V*, a deep sea fishing vessel of the Directorate of Fisheries, Government of West Bengal. In view of the increasing importance to offshore fishing for stepping up the fish production it is considered worth reporting the results of this trawling operation.

'Swatch of no grounds' is a remarkable depression in the coastal bank which extends in a south-westerly direction from a position in about latitude $21^{\circ} 24' N$, longitude $89^{\circ} 34' E$ where it descends steeply from depth of 20 fathoms at its shore end to 454 fathoms about the middle of its length, beyond which it sinks to 595 fathoms. It is from 6-12 miles in width and has a length of approximately 70 miles. Within a duration of 20 minutes at a distance of one mile trawling, the fathometer reading showed uneven depths ranging from 20-95 fathoms. The latitude and longitude while shooting and hauling the net were $21^{\circ} 13' N$, $89^{\circ} 16' E$ and $21^{\circ} 14' N$, $89^{\circ} 17' E$ respectively (Fig. 1).

Although the total catch was 138.6 Kg, 24 species of fishes were found in a single haul. *Pomadasys hasta* (20.5-38.5 cm) predominated the catch constituting 32%. The large sized *Lutjanus dodecakanthus* (22-26 cm), *Parastromateus niger*

(28-32 cm), *Trichiurus savala* (50-85 cm) and *Tachysurus jella* (18.5-40.5 cm) which are all the usual commercially important marine species marketed in West Bengal together constituted 50%, of which *Lutjanus* and *Parastromateus* formed 38%. The Indian mackerel *Rastrelliger canagurta* (19.5 cm) and the Malabar travally *Carangoides malabaricus* (22.8 cm) were also recorded from the catches constituting 2%. The miscellaneous varieties constituted 16% and were represented by *Hilsa toli*, *Parupeneus indicus*, *Zebrias guagga*, *Argyrops spinifer*, *Lutjanus johmi*, *L. malabaricus*, *Pomadasyss maculatus*, *Eutherapon theraps*, *Umbrina dussumieri*, *Fistularia villosa*, *Nemipterus japonicus*, *Lactarius lactarius*, *Priacanthus hamrur*, *Pseudorhombus javanicus*, *Uranoscopus guttatus*, *Minous monodactylus*, and *Eulamia melanoptera*.

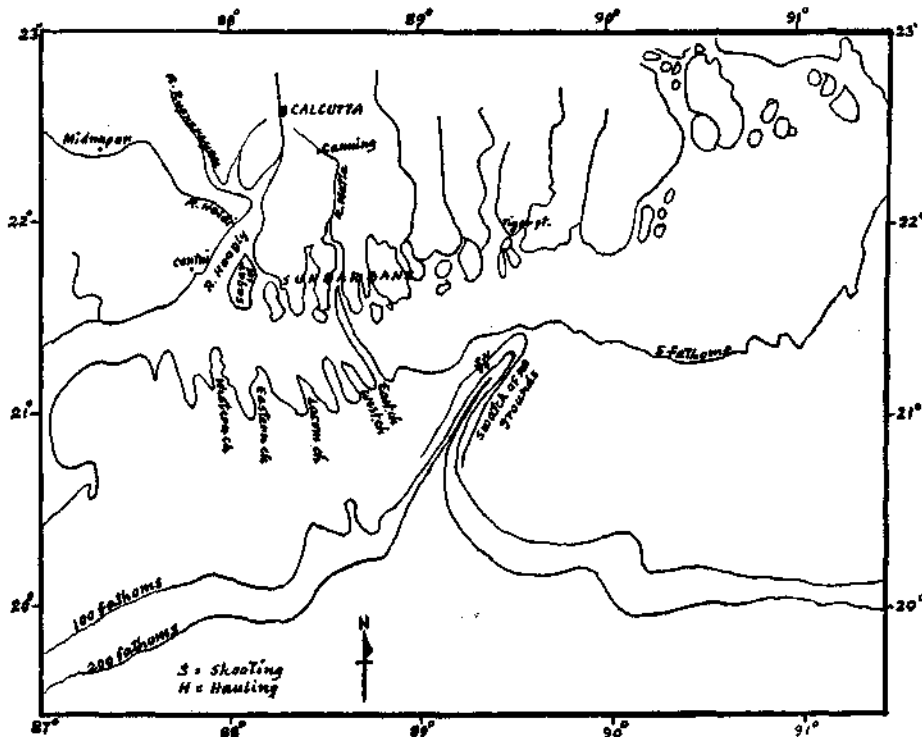


FIG. 1. 'Swatch of no grounds' and the area of fishing.

It is generally indicated from the observations that the sizes of fishes of this region were far better compared with the catches of sand heads, off Mahanadi, Devi and Prachi rivers and off Black Pagoda and Gopalpur, where regular offshore fishing operations are being undertaken by *KALYANI* I-V. This information may be useful for a commercial exploitation of the fishing of this area in future.

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