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TAIWANESE LONGLINE FISHERY IN THE ATLANTIC, 1987

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1. Fishery activities

The 1987 yearly total catch of tunas and tunas-like species in the Atlantic was estimated about 23,375 MT, which summed up the amount of 4,587 MT and 18,788 MT for the north Atlantic and the south Atlantic, respectively. This amount per se represented an about 16,000 MT dramatic decrease compared with the estimate of catch amounted 39,492MT in 1986. Of these 1987 catches in weight, the catch of albacore is still dominant about 19,712MT (about 84.33% of the total Atlantic tunas catch), including 15,776MT taken from the South stock, and 3,936MT from the North stock, which are, respectively, about 10,000MT and 5,000MT lower than in 1986. And yellowfin tuna, bigeye tuna, bluefin tuna and young tuna were proportioned about 3.26%, 5.63%, 0.18% and 0.61% , respectively; 3.22% for billfishes and 2.73% for the other species.

Taiwanese longliners abruptly dropped the numbers to 140 vessels operating in the Atlantics in 1987 compared to 190 vessels in 1986 (Fig. 1).

2. Statistics

The Tuna Resource Research Center, Institute of Oceanography, National Taiwan University, has been in charge of the responsibility on the processing of catch statistics and the delineation of scientific researches by the Council of Agriculture. For the sampling of catch and effort, Taiwan Fisheries Bureau has incorporated with the logbook collection and fishing vessels' registration. The raw information of logbooks (TFB) and daily radio reports (TLG) is used to estimate yearly catch and effort, and a coverage rate, defined as the ratio of total hooks used reported in TLG and TFB, was estimated and used to raise the catch and effort of the TFB by 5°-squared area. The estimate of catch and effort of Taiwanese longline fishery in the Atlantic has routinely been reported to ICCAT Secretariat.

3. Research

1987 researches on Atlantic albacore were dealing with the establishment of Atlantic albacore data base including catch statistics and length measurement; and moreover, the production model analysis for both the north and south stocks were updated in accordance to the basis of the catch per unit effort of Taiwanese longline fishery. A primary work on the data of catch at age (or age-length key) was also structured such that the cohort analysis and Beverton and Holt's yield per recruit model, as well as the interaction study between surface and longline fisheries, attempt to be applied in assessing Atlantic albacore stock.

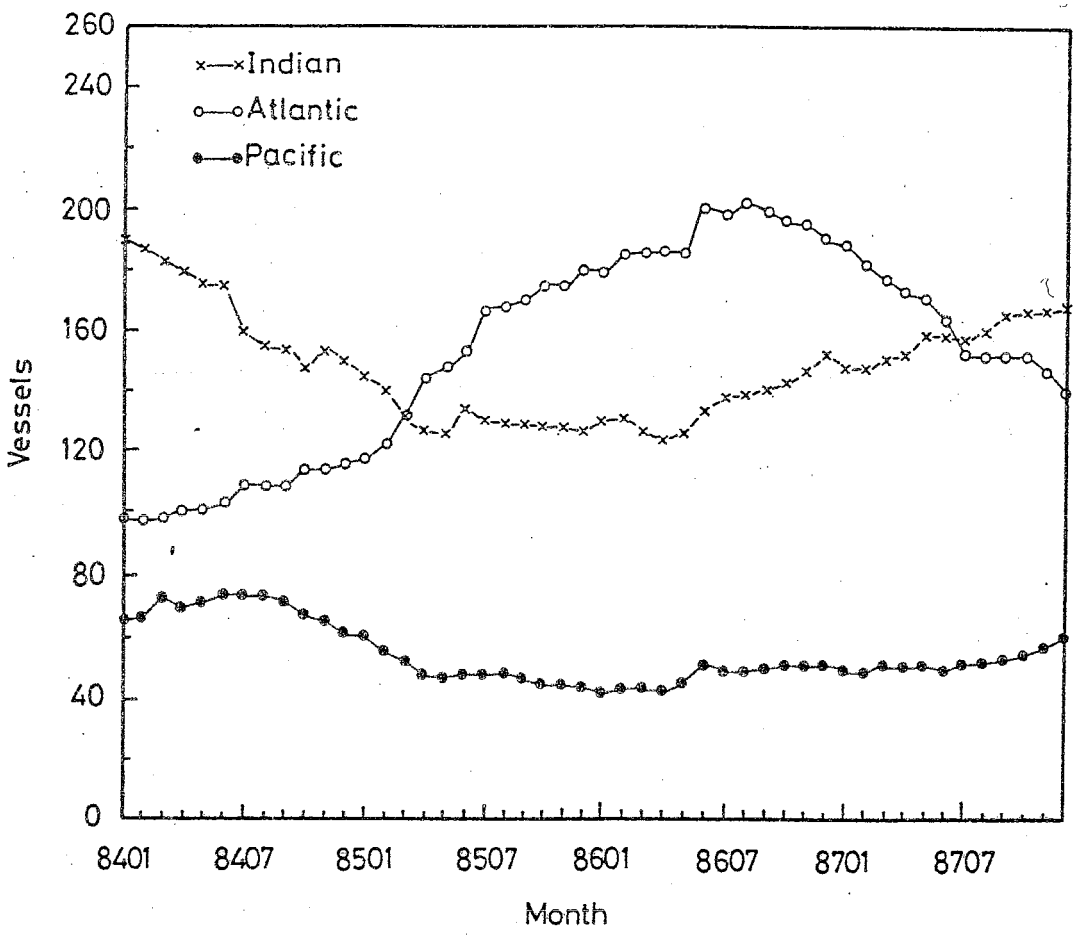

Fig. 1. The variation of Taiwanese longliners operated among the three Oceans, where the abscissa indicates the year and month, eg., 8401 is January, 1984 etc., and the ordinate is in the numbers of vessels.