

## **Study on tuna longline fishery in Phuket province**

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### **Abstract**

Tunas (*Thunnus* spp.) from longline fishery are important economic fish since the high price, tasty, and needed from oversea markets. The foreign tuna longliners landing in Phuket for transferring their catches to export the market. The catch of fish from tuna longliners unloaded in Phuket in 2011 was 4,318,743 kg (yellowfin tuna 88 % and bigeye tuna 12%) with the value of 690,990,400 baht. Besides tuna is the main material for canned manufactures in Thailand. This study aimed to assemble the information about tuna longline fishery (TLC) particularly in Phuket, such as fishing gear, vessel, fishing method, the catch, price, etc., by review the papers, books and internet searching. Longline can catch big size of tuna with high quality and value. TLF sets a long mainline (units of mainline called baskets), made of tarred rope or nylon monofilament which attached to branchlines, each with a single baited hook. The line is suspended in the water by floatlines that usually made from black or red vinyl tarred line attached to floats or buoys (hard plastic). The tuna longline is usually set in the morning and haul in the afternoon. There are three types of bait such as fresh milkfish, frozen squid and frozen mackerel scad. In the fisher opinions, each type of bait has different capture efficiency while the fresh milkfish is the best. Tuna longliner can categorize as the 3 groups; < 20, < 100 and > 100 gross ton. The cold storage is necessary for quality keeping of the caught tuna. Tuna longline is a passive and selective gear which not much destroy natural resources because size of hook and the bait are specific. However it can catch some bycatch species such as shark, turtle which cause to discards problem issue. As TLF earn high profit, hence giving a support to fishers to fish more tuna is essential. TLF may be a new option for Thai fisherman who are experiencing problems with overfishing in the country.

### **References**

- Steve Beverly, Lindsay Chapman and William Sokimi. 2003. Horizontal Longline Fishing Methods and Techniques. Noumea, New Caledonia: Secretariat of the Pacific Community. 130 pp.
- Sampan Panjarat, Sichon Hoimuk, Thumawadee Jaiyen, Supachai Rodpradit and Wanlee Singtongyam. 2016. Tuna Longline Fishery in the Indian Ocean of Foreign Fishing Vessels Landing at Phuket Province of Thailand, 7, 1-46
- Shelley Clarke, Mayumi Sato, Cleo Small, Ben Sullivan, Yukiko Inoue and Daisuke Ochi. 2014. Bycatch in longline fisheries for tuna and tuna-like species: a global review of status and mitigation measures, Rome, 199 pp.