Juvenile Fishes Collection in the Coastal Areas Using Push Net & Identification Practices

SEAFDEC/TD/Capture Fishery Technology Division

General description of the Gear

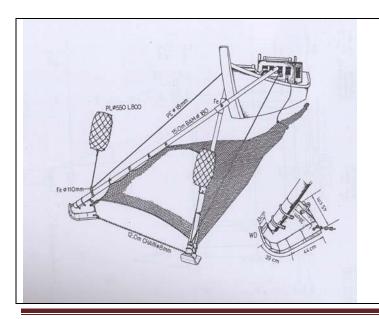
The net of this gear has three distinct parts: the upper and the lower part, and the codend. There is a ground-rope, which is either a chain or some rope weighted with sinkers, so that is touches the sea bottom during fishing operation. The ends of the ground rope are fastened to the poles, which hold the net. The head rope hangs along the length of the poles.

The poles are either bamboo or trunks of pine trees or iron pipe (mostly like to use an iron), 6-40 meters long, depending on the size of gear and the scale of fishing. Two poles are tied so as to form on inverted V-shape, ending in wooden or iron skis of stainless steel which slide along the sea bed. Floats are also attached near the skis to prevent them from getting stuck in the mud, on large-sized gears, the floats are adjustable by means of a rope and a ring fixed to the pole. Very long poles are often not tied to each other but are fastened directly to an outrigger or a boom on the foredeck of the fishing boat.

Fishing operation

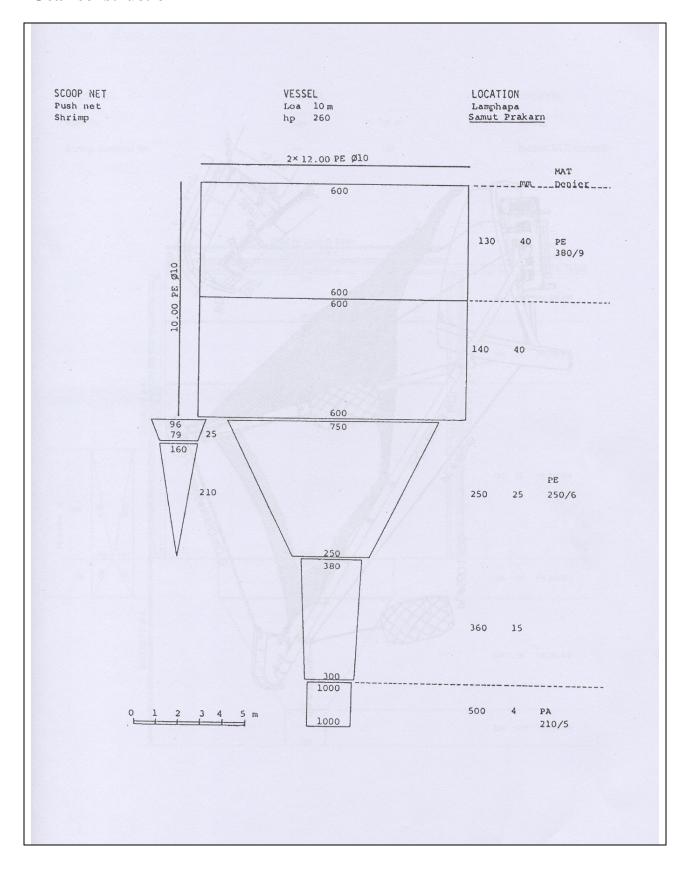
Push net fishing is operated from an engine-driven boat, either in the day-time or at night. When the boat arrives at the fishing ground, the net is tied to the poles, with the ground-rope and head-rope in position. The gear is lowered in the water and floats adjusted until the skis touch the bottom. At the end of a fishing operation, the cod-end is hauled by means of a rope attached to it, emptied, and lowered for the next round of fishing. The gear is operated widely in coastal areas of Thailand, mostly in Surat Thani, Satun, Nakhon Sri Thammarat and Samut Prakarn provinces.

Fishing Vessels using this gear



Vessels using push net can be included in the size 8-20~m and 150~Hp-500~Hp in power.

Gear construction



Survey Area: (for Exercise)



Methodology:

- 1) Record the position and other general information in the Worksheet (as Annex 1)
- 2) Weight total catch per haul per hour
- 3) Sorting to group (Fish, crab, Mantis, Shrimp,....)
- 4) Weight each group
- 5) Preserved the juvenile fishes by formalin 10%
- 6) Take back to Laboratory for species and density identification

Assignment to Trainees

- 1) The operation will be conducted 2-3 times/trip depend upon sea condition
- 2) 6 groups per trip will embark on board Push net vessel
- 3) Each group (2 persons) have to collect and preserve the juvenile samples (equally by weight) based on the Methodology, and
- 4) Take the samples back to Laboratory for species/family and density identification (ind./haul) under the assisting by our instructor
- 5) Reporting on the finding by Each group (on 29 May 2007).

ANNEX 1: Worksheet for Juvenile fishes collection by Push net

PUSHNET FISHING LOGSHEET Operation No.____ Recorded by _____ **General information** Name of fishing boat: Weather condition Date: Survey station No: Sea condition Moon age: Phase: **Start operating** Finish operating Fishing gear Time Time Type of net: Latitude Latitude Towing distance: Towing time: Longitude Longitude Towing speed (kt): Towing direction: **Sampling information Start hauling** Finish hauling Time Time Total catch (kg) Latitude Latitude Sampling weight (kg) ___ Longitude Depth of capture (m) _ Longitude N/R: Not be recorded **Species** Remark No. Number Weight (kg)