



Catch Rate and Species Composition of Anchovy Falling Net with Light Luring Fishing in the Coastal Areas of the Eastern Gulf of Thailand 15-20 March 2026

Background

Anchovy Species (*Stolephorus* spp. and *Encrasicholina* spp.) are among Thailand's most economically significant marine resources, widely consumed domestically and internationally. The total catch increased from 130,000 tons in 2015 to 151,400 tons in 2022 (Department of Fisheries, 2022). Fishing activity is particularly concentrated in the eastern Gulf of Thailand, specifically within Rayong, Chanthaburi, and Trat Provinces. Anchovy fishing is highly active, with Rayong reporting 13,694 tons in 2023 (Department of Fisheries, 2023). Anchovy falling nets accounted for 57.51% of the total catch in 2018 (Department of Fisheries, 2018).

Despite their efficiency, falling nets can capture juvenile marine species, raising ecological concerns. Their use within 3 nautical miles has been prohibited since 1999, and the 2023 Ministerial Regulation further restricts several gear types in the coastal zone, although provincial committees may allow operations on a case-by-case basis. In practice, small-scale fishers in Rayong operate within 1.5–2 nautical miles; however, comprehensive scientific data on vessels under 10 gross tons—particularly regarding species composition, size, and distribution remain limited, constraining evidence-based management decisions.

In response to this need, a two-year project has been established in collaboration between the Research and Development Division of SEAFDEC/TD and the Marine Fisheries Research and Development Division, DOF Thailand, to collect critical scientific data on catch rates, species composition, and distribution of marine organisms caught by small-scale anchovy falling-net vessels in Rayong's coastal water. This evidence-based approach will help ensure that future decisions balance fishery sustainability with socio-economic needs.

In 2025, the research proposal was completed and received approval from SEAFDEC/TD and the DOF Thailand. The preliminary survey was conducted from 27 to 29 October 2025 in Rayong Province. This preliminary survey was conducted to validate the methodology and coordinate with local fishing vessels. However, the survey will be conducted from 15 to 20 March 2026 in the Pak Khlong Klaeng area, Rayong Province, using two small-scale anchovy falling-net vessels. The survey will cover fishing grounds at distances of 2,500 to 3,500 meters and 4,500 to 5,400 meters from the shoreline to collect and subsequently analyze the data.

Objectives

- To study the catch rate, species composition, and size of marine organisms caught using anchovy falling nets operated with a 20 kW generator at different fishing areas (2,500–3,500 m and 4,500–5,400 m from shore).
- To study the effect of fishing areas on the catch rate and size of anchovies caught using a 20 kW generator.
- To study the effect of fishing areas on the catch rate and size of other economically important bycatch species caught using a 20 kW generator.
- To interview the fishermen using the Anchovy falling net in the Pak Khlong Klaeng area



Expected Outputs

- The effect of fishing areas on the catch rate and size of marine organisms caught using a 20 kW generator.

Date and Venue

- **Dates:** 15-20 March 2026
- **Venue:** Rayong province

Participants

The participants:

SEAFDEC

- | | |
|--------------------------|-----|
| 1. Krittapas Suchato | FTR |
| 2. Ms. Jariya Sornkliang | FMR |

EMDEC

1. Miss Narakorn Somwanthana
2. Miss Panida Bualangka
3. Mr. Worakit Lerdprasert
4. Mr. Nirun Choosuan
5. Mr. Mongkol Singnoi
6. Mr. Kosol Rattanasopha
7. Mr. Noppadol Kitsomret
8. Mr. Sittipong Petcharakool
9. Mr. Pichitpong Poolcharoen
10. Mr. Chatchai Phuyoi
11. Mr. Udon Jamjenkarn
12. Miss Nitwadee Rittison

DOF

1. Mr. Kritsada Thongsila



Tentative Schedule

Time (GMT +7)	Description	Remarks
Day 1: 15 March 2026, Sunday		
08.00 – 11.00	Travel from SEAFDEC/TD to EMDEC	
11.00 – 12.30	Lunch break	
12.30 – 13.30	Discussion of detailed work plan	SEAFDEC team
13.30 – 14.30	Inspection and preparation of equipment	
14.30 – 16.30	Meeting with the fishermen to discuss a detailed work plan and operational readiness	Tentative
Day 2: 16 March 2026, Monday		
09.00 – 11.00	Discussion of detailed work plan with EMDEC team	
11.00 – 12.00	Preparation of equipment for departure	
12.00 – 13.30	Lunch break	
13.30 – 13.50	Travel from EMDEC to Pak Khlong Klaeng Port	
13.50 – 14.50	Meeting with the fishermen to discuss the operational plan	
14.50 – 17.00	Loading equipment onto the vessel	
17.00 – 05.30	Shipboard survey in area A	
Day 3: 17 March 2026, Tuesday		
05.30 – 07.30	-Collection data by EMDEC method at Pak Khlong Klaeng port -Interview the fishermen using the Anchovy falling net	
07.30 – 10.30	Collection of anchovy data at laboratory	At EMDEC
10.30 – 11.00	Lunch break	
11.00 – 14.00	Collection of anchovy data at laboratory (Cont.)	
14.00 – 14.20	Travel from EMDEC to Pak Khlong Klaeng Port	
14.20 – 15.00	- Load equipment onto the vessel - Discuss the work plan	
15.00 – 07.20	Shipboard survey in area B	
Day 4: 18 March 2026, Wednesday		
07.20 – 09.20	-Collection data by EMDEC method at Pak Khlong Klaeng port -Interview the fishermen using the Anchovy falling net	
09.20 – 12.20	Collection of anchovy data at laboratory	At EMDEC



Time (GMT +7)	Description	Remarks
12.20 – 13.00	Lunch break	
13.00 – 16.00	Collection of anchovy data at laboratory (Cont.)	
16.00 – 16.20	Travel from EMDEC to Pak Khlong Klaeng Port	
16.20 – 17.00	- Load equipment onto the vessel - Discuss the work plan	
17.00 – 05.30	Shipboard survey in area A	
Day 5: 19 March 2026, Thursday		
05.30 – 07.30	-Collection data by EMDEC method at Pak Khlong Klaeng port -Interview the fishermen using the Anchovy falling net	
07.30 – 10.30	Collection of anchovy data at laboratory	At EMDEC
10.30 – 11.00	Lunch break	
11.00 – 14.00	Collection of anchovy data at laboratory (Cont.)	
14.00 – 14.20	Travel from EMDEC to Pak Khlong Klaeng Port	
14.20 – 15.00	- Load equipment onto the vessel - Discuss the work plan	
15.00 – 07.20	Shipboard survey in area B	
Day 6: 20 March 2026, Friday		
07.20 – 09.20	Collection data by EMDEC method at Pak Khlong Klaeng port	
09.20 – 11.00	Collection of anchovy data at laboratory	At EMDEC
11.00 – 12.20	Wrap up meeting for the data collection result	
12.20 – 13.00	Lunch break	
13.00 – 16.30	Return to SEAFDEC/TD	

Responsible contact person

Mr. Krittapas Suchato Research and Development Division
P.O. Box 97 Phrasamutchedi, Samut Prakan 10209, Thailand
Email: krittapas@seafdec.org