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National Report of Thailand

Delegation of Thailand

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Abstract

This report provides an update on the operations of Thai overseas fisheries within the SIOFA competence area in 2024. Two Thai vessels were operated using trawl and handline in the same fishing ground as previous year, located at latitude 9° - 11° S and longitude 60° - 62° E. Trawl catch dramatically dropped in consistence with a decrease in fishing trips compared to the previous year. The catch composition was slightly different from the previous year, but remained dominated by targeted groups of round scads, threadfin breams and lizardfishes. Contrastingly, handline catch increased by 22% and its composition was similar to the previous year, dominated by trevallies, red snappers, jobfish, and groupers.

There are no illegal activities reported in 2024. Onboard observers' scheme was run smoothly with 100% coverage for both fishing gears. No VME thresholds were triggered in any operations. A total of 413 kg of vulnerable marine ecosystem tax (VME taxa) were reported, consisting of sponges and dead corals. Regarding bycatch, a total of 536.30 kg of incidental bycatch was reported, with no reported gear interaction with seabirds or marine mammals in the fishing year.

[1] Restricted documents may contain confidential information. Please do not distribute restricted documents in any form without the explicit permission of the SIOFA Secretariat and the data owner(s)/provider(s).
[2] Documents available only to members invited to closed sessions.

Recommendations
• It is recommended that the SC notes the national report provided by Thailand • It is recommended that the SC considers Thailand national report

Content

Description of fisheries

Thailand has fished in SIOFA competence area since 2015. Thai fishery in SIOFA is separated into two periods. During 2015 to 2017, 62 fishing vessels with different fishing gears including pair trawl, otter board trawl, and fish traps, had fished in the Saya de Malha Bank area. Then it was paused in 2018 caused by national fisheries reformation, which aimed to fighting Illegal, Unreported, and Unregulated fishing (IUU fishing) and enhance sustainable marine fisheries management. All Thai overseas fishing vessels at that time were called back to ports for inspection and installed control and surveillance system for at sea activity monitoring. The validated fishing vessels resumed fishing in the SIOFA area in 2019 and have been fishing until present. Currently, Thai fishing vessels wishing to operate in the SIOFA area must be authorized by the Thai government.

They are regulated to fish in sub-area 8 of the SIOFA area, in the Saya de Malha Bank, located at 9° - 11° S latitude and 60° - 62° E longitude (Figure 1). The fishing activities were confined in this area throughout the year. The fishing gear used by Thai fishing vessels are bottom otter board trawl as the main gear and handline as the secondary gear.

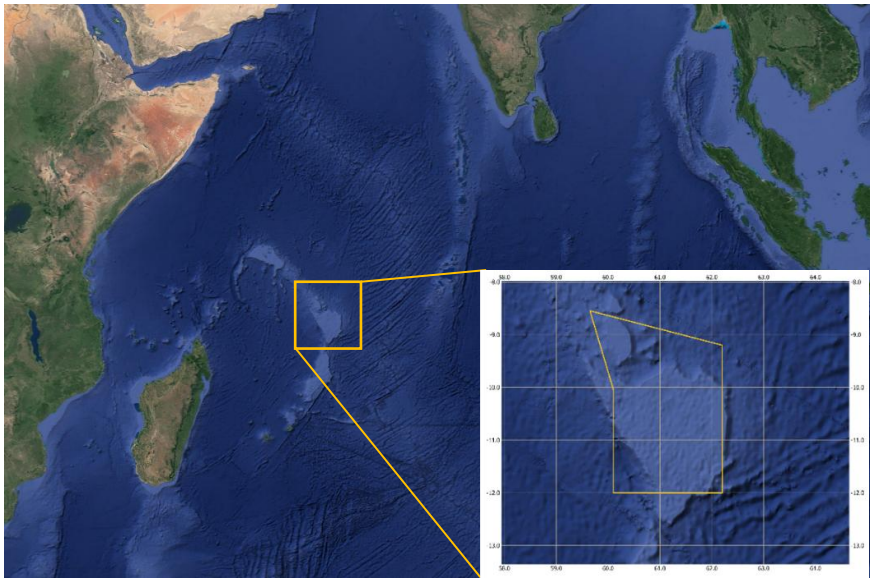

Figure 1 The designated area of Thai fishing vessels in SIOFA area of competence

The number of Thai fishing vessel operating in SIOFA area over the last five years is shown in Table 1 and Figure 2. Only two vessels had operated in 2024.

Table 1: Number of Thai fleet composition by gear in the last five years

Year	Vessels that actively fished	
	otter board trawl*	handline*
2020	3 (230.22 - 312.73 GT)	3 (230.22 - 312.73 GT)
2021	3 (230.22 - 312.73 GT)	3 (230.22 - 312.73 GT)
2022	4 (230.22 - 312.73 GT)	4 (230.22 - 312.73 GT)
2023	2 (230.22 - 312.73 GT)	2 (230.22 - 312.73 GT)
2024	2 (230.22 - 312.73 GT)	2 (230.22 - 312.73 GT)

Remark: *Otter board trawl and handline are operated on the same vessel

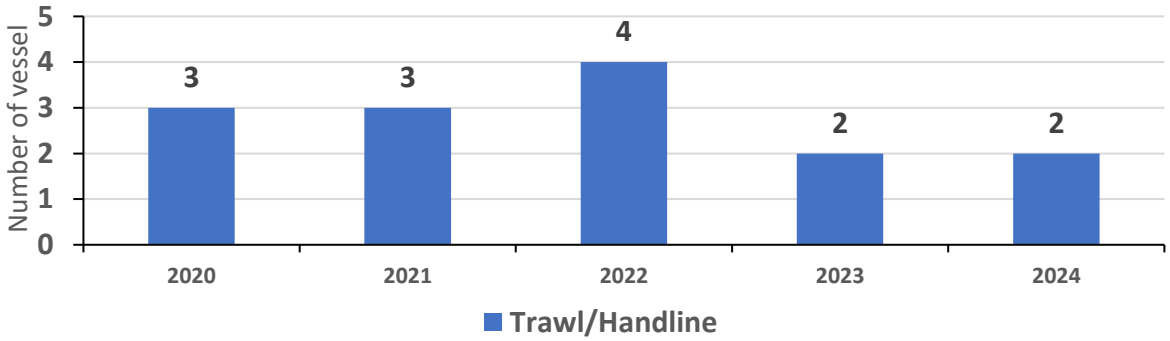

Figure 2 Number of Thai fishing vessel operating in SIOFA area in 2020-2024

Thai vessels primarily use otter board trawl as the main fishing gear, and handline as an alternate gear. However, the intensity of their use may shift depending on economic factors. Trawl effort sharply increase in 2021-2022, then gradually declined in the following years. In contrast, handline fishing effort remained relatively stable during 2021–2023 but doubled in 2024, with catch increasing every year since 2022. Changes in fishing behavior are driven by rising fuel price and shifting market demand. The catch and effort by gear over the last five years are presented in Table 2 to Table 5.

Table 2 Summary table of otter board trawl effort in the last five years (hauls)

Year			Sub-areas for reporting effort data						
	1	2	3.a	3.b	4	5	6	7	8
2020	-	-	-	-	-	-	-	-	464
2021	-	-	-	-	-	-	-	-	1,003
2022	-	-	-	-	-	-	-	-	984
2023	-	-	-	-	-	-	-	-	476
2024	-	-	-	-	-	-	-	-	226

Table 3 Summary table of otter board trawl catches (tons) in the last five years

Year	Sub-areas for reporting catch data								
	1	2	3.a	3.b	4	5	6	7	8
2020	-	-	-	-	-	-	-	-	924.51
2021	-	-	-	-	-	-	-	-	2,922.31
2022	-	-	-	-	-	-	-	-	2,525.87
2023	-	-	-	-	-	-	-	-	1,667.52
2024	-	-	-	-	-	-	-	-	321.84

Table 4 Summary table of handline effort in the last five years (days)

Year	Sub-areas for reporting effort data								
	1	**2**	**3.a**	**3.b**	**4**	**5**	**6**	**7**	**8**
2020	-	-	-	-	-	-	-	-	133
2021	-	-	-	-	-	-	-	-	52
2022	-	-	-	-	-	-	-	-	49
2023	-	-	-	-	-	-	-	-	45
2024	-	-	-	-	-	-	-	-	95

Table 5 Summary table of handline catches (tons) in the last five years

Year	Sub-areas for reporting catch data								
	1	**2**	**3.a**	**3.b**	**4**	**5**	**6**	**7**	**8**
2020	-	-	-	-	-	-	-	-	379.39
2021	-	-	-	-	-	-	-	-	38.34
2022	-	-	-	-	-	-	-	-	193.00
2023	-	-	-	-	-	-	-	-	308.33
2024	-	-	-	-	-	-	-	-	376.12

Catch, effort and CPUE summaries

Footprint

Thai fishing fleet has operated in the south bank of Saya de Malha Bank. Bottom trawl had mainly fished in central of the bank at the depth ranged 50 to 112 meters. Handline fished at submerged rocks in northern part of the south bank at the depth ranged 20 to 35 meters. The footprint in 2024 is shown in Figure 3.

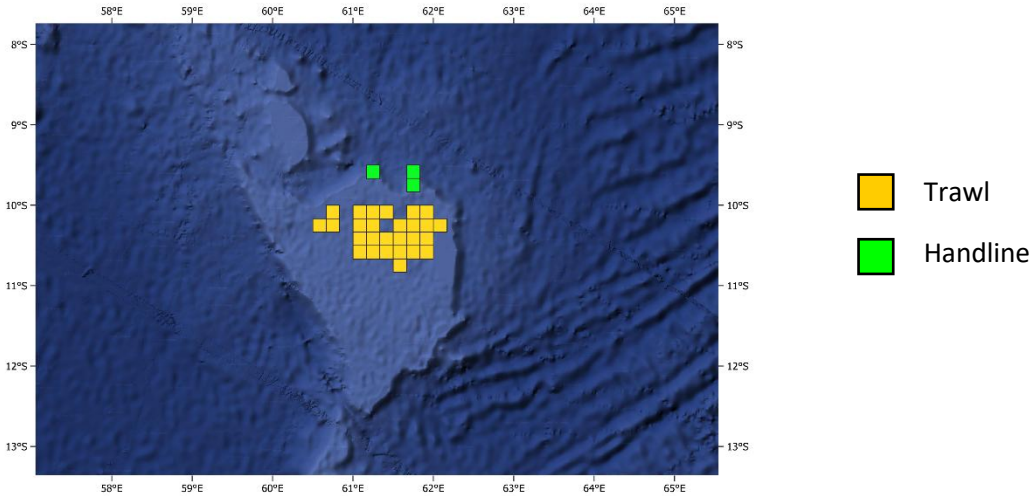

Figure 3 The aggregated Thai fishing footprint from 2024

Otter board trawl

The total catch of otter board trawl in 2024 was 321.84 tons. The catch rate was decreased from 887.95 kg/hour in 2023 to 368.63 kg/hour in 2024 The trawl catches by main groups and fishing effort are presented in Table 6 and Figure 4.

The catch composition from trawl in 2024 differed from the previous year due to shifting demand from processing factories. The catch was dominated by round scads (Decapterus spp.) and t hreadfin breams (Nemipterus spp.), accounted for 30.46% and 14.72% of the total catch, respectively, followed by goatfishes (Upeneus spp.) 13.66%, lizardfishes (Saurida spp.) 11.25%, barracudas (Sphyraena spp.) 3.96%, and other species 25.95% (Figure 5). It is noted that round scads, threadfin breams, goatfishes and lizardfishes are still the majority in the catch.

Table 6 Catch (tons) by main target species from otter board trawl in 2024

Year	*Saurida* spp.		*Decapterus* spp.		*Nemipterus* spp.		*Upeneus* spp.		*Sphyraena* spp.		Others		Total	
	R	D	R	D	R	D	R	D	R	D	R	D	R	D
2020	132.73	0	236.53	6.35	117.55	0	89.1	0	67.29	0	281.33	24.19	924.51	30.54
2021	712.56	0	871.06	0.84	367.9	0	356.97	0.43	124.55	0	489.27	61.21	2,922.31	62.48
2022	853.74	0	767.87	4.38*	332.67	0	140.28	0.12	88.12	0	343.2	73.89	2,525.87	78.39
2023	940.70	0	358.54	5.95*	178.09	0	28.57	0	17.24	0	144.38	88.41	1,667.52	94.36
2024	39.66	0	94.56	12.78*	51.87	0	48.13	0	13.97	0	73.65	17.78	321.84	30.56

Remark R = retained catch, D = discarded catch, catch excluded incidental bycatch
*Fishes are kept as bait fish for handline

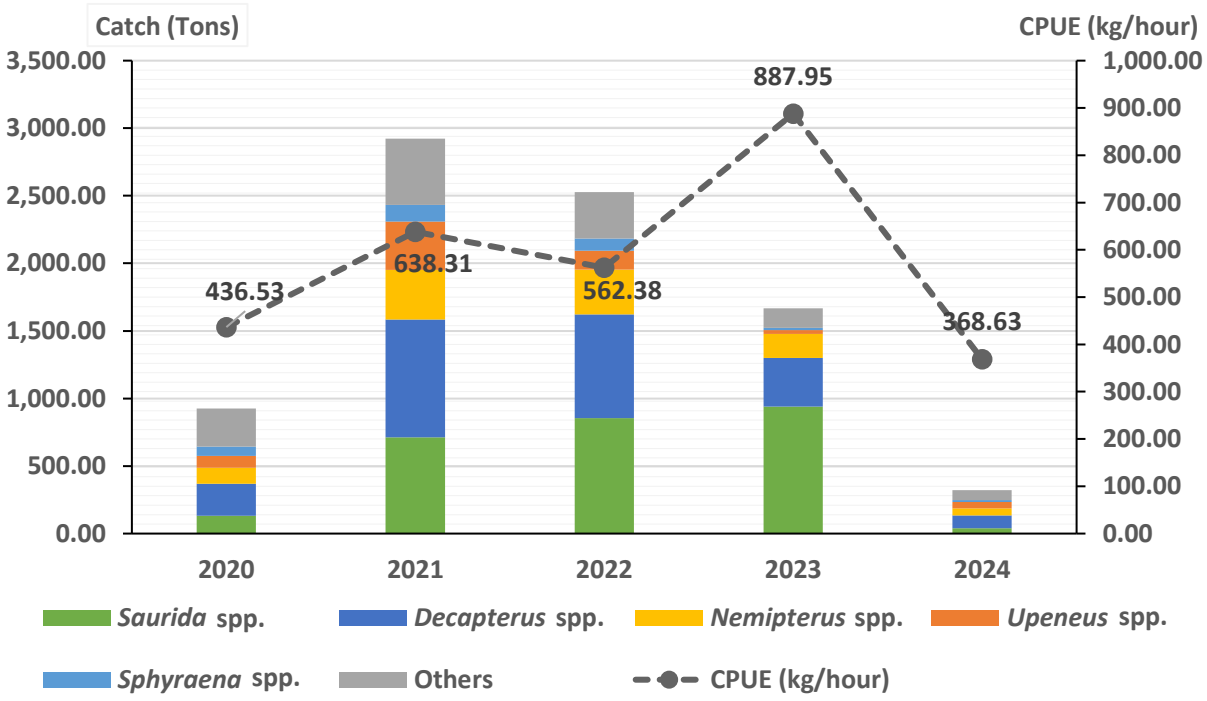

Figure 4 Catch and catch per unit effort (CPUE) of Thai otter board trawlers from 2020 to 2024

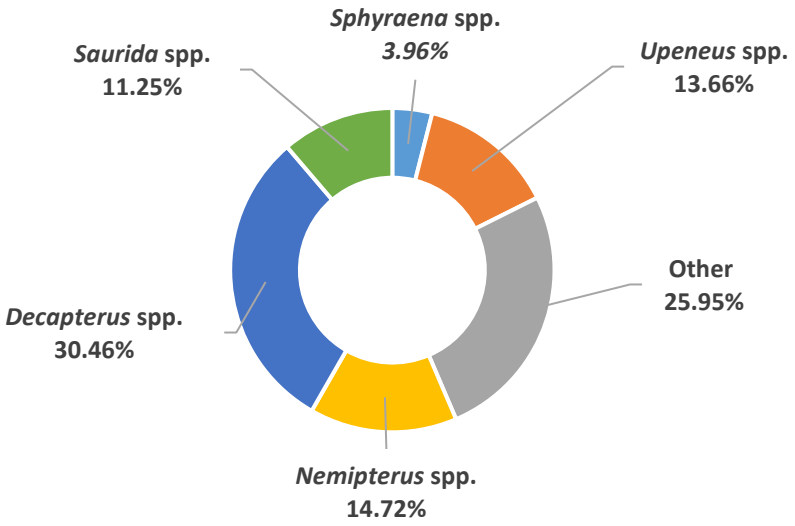

Figure 5 Catch composition of otter board trawl in 2024

Handline

In 2024, handline fishing yielded 376.12 tons, an increase of 22% from the previous year. However, the catch rate decreased from 6,851.78 kg/day in 2023 to 3,959.17 kg/day in 2024. The catch composition was similar to the previous year, dominated by trevallies (*Carangoides* spp.) of 86.86%, followed by red snappers (*Lutjanus* spp.) 7.54%, green jobfish (*Aprion virescens*) 2.58%, groupers (Serranidae) 0.68%, and other species 2.34% (Figure 7). There was a noticeable shift in the handline fishing practices with increasing of trevallies and high-value fish for filleting. This corresponded with growing demand from restaurants.

There was zero discard from handline fishing. The catch and effort of handline fishing are presented in Table 7 and Figure 6.

Table 7 Catch (tons) by main target species from handline in 2024

Year	*Carangoides* spp.		*Lutjanus* spp.		Serranidae*		*Aprion virescens*		Others		Total	
	R	D	R	D	R	D	R	D	R	D	R	D
2020	341.91	0	17.29	0	5.81	0	2.92	0	11.46	0.01	379.39	0.01
2021	22.96	0	3.12	0	3.84	0	1.08	0	7.35	0.02	38.34	0.02
2022	175.26	0	6.48	0	3.87	0	2.86	0	4.52	0	193.00	0.00
2023	285.24	0	9.35	0	7.33	0	2.07	0	4.35	0	308.33	0.00
2024	326.69	0	28.35	0	2.57	0	9.70	0	8.81	0	376.12	0.00

Remark R = retained catch, D = discarded catch, catch excluded incidental bycatch
*main species are *Plectropomus* spp. and *Epinephelus* spp.

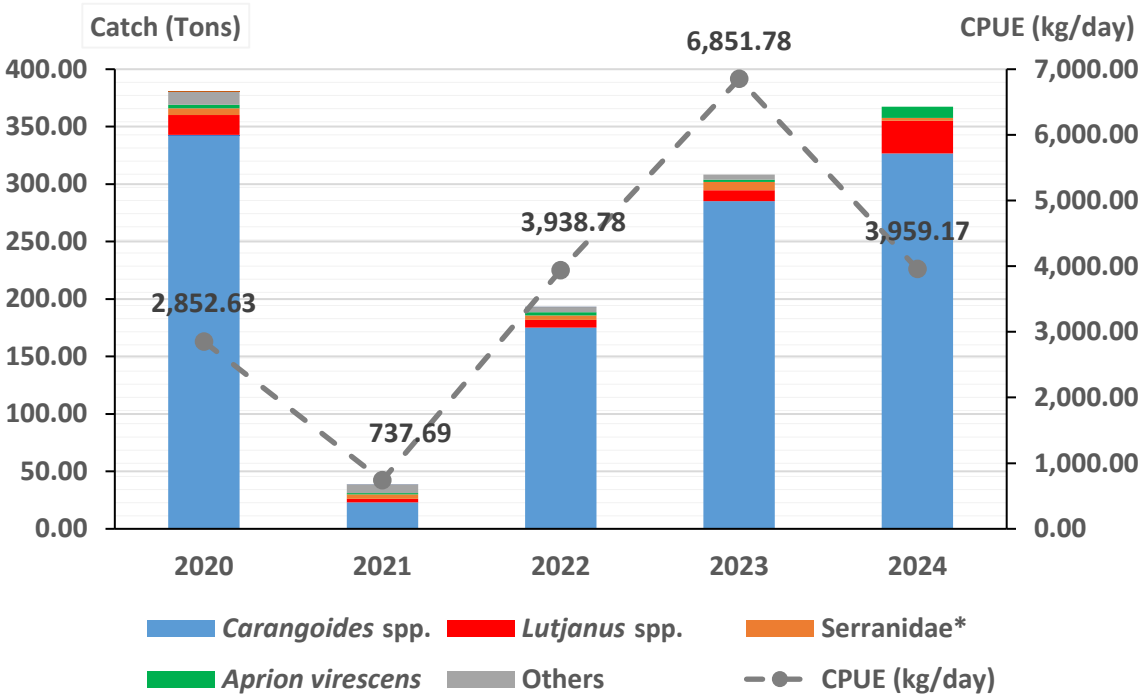

Figure 6 Catch and catch per unit effort (CPUE) of Thai handline fishing from 2020 to 2024

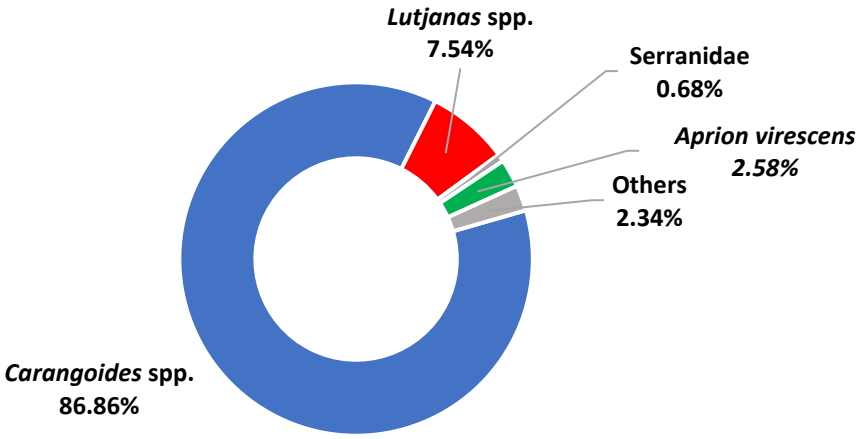

Figure 7 Catch composition of handline fishing in 2024

Fisheries data collection and research activities

Since 2019, Thailand has implemented a fishery data collection system for trawl and handline fishing operations in the SIOFA area. According to Thai fisheries regulations, all overseas fishing vessels are required to record every fishing activity in a fishing logbook and present it to inspection officers when landing at ports. Additionally, any Thai trawler operating in the SIOFA area must have a scientific observer onboard for every fishing trip.

Fisheries data are collected by two approaches, by fishing logbook and by onboard observers. The logbook is recorded by vessel captains as required by the law. Onboard observers are boarded on

every fishing trip and requested to collect scientific data. The fishery data is recorded in the finest details as possible. However, the data quality from fishing logbooks is slightly different from which recorded by the observers. Logbooks tend to be less detailed. Catches are recorded as species group (usually in Thai language). The resolution of the collected data are shown in Table 8.

Table 8 Details on the scales and resolutions of the fishery data collection for trawl and handline

Trawl and handline data collection items								
Year	**tow / set** (*individual or some aggregation*)		**time scale** (*set-tow hauling time, daily, etc.*)		**spatial scale** (*tow/set exact position or grid, please provide grid resolution*)		**species details** (*any aggregation or species grouping*)	
	Commercial (Logbook)	Observer	Commercial (Logbook)	Observer	Commercial (Logbook)	Observer	Commercial* (Logbook)	Observer**
2020	set by set	set by set	set-tow hauling time (hours and minutes)	set-tow hauling time (hours and minutes)	exact position	exact position	species grouping	Species level (target)/ species grouping (non target)
2021	set by set	set by set	set-tow hauling time (hours and minutes)	set-tow hauling time (hours and minutes)	exact position	exact position	species grouping	Species level (target)/ species grouping (non target)
2022	set by set	set by set	set-tow hauling time (hours and minutes)	set-tow hauling time (hours and minutes)	exact position	exact position	species grouping	Species level (target)/ species grouping (non target)
2023	set by set	set by set	set-tow hauling time (hours and minutes)	set-tow hauling time (hours and minutes)	exact position	exact position	species grouping	Species level (target)/ species grouping (non target)
2024	set by set	set by set	set-tow hauling time (hours and minutes)	set-tow hauling time (hours and minutes)	exact position	exact position	species grouping	Species level (target)/ species grouping (non target)

Remark: *species grouping in logbook is roughly at genus/family levels
**target species reported by observers are identified into species level, while non-targets are reported as grouped species at genus/family level

VME threshold

Thailand has recognized that fishing practice must have least impact on the vulnerable marine ecosystems (VMEs). The threshold limits for VMEs catch are set for all Thai bottom fisheries within SIOFA area, following SIOFA CMM 01(2024). The vessels are required to cease fishing and relocate if they accidentally capture living corals, sponges, or other VME taxas exceeding the thresholds. The protocols for thresholds and relocation are detailed in Table 9.

Table 9: Threshold level and move-on protocol for Thai vessels when encounter with VME taxas

Gear	Threshold (kg)	Move-on protocols
Trawl	corals > 60 kg sponges > 300 kg	move at least 2 nautical miles
Longline	corals or sponges > 10 units* per 1,000 hooks or per mainline of 1,200 meters, whichever is the shorter	move at least 1 nautical mile
Trap/pot	corals or sponges > more than thresholds to be assigned by SIOFA secretariat	move at least 1 nautical mile from the radius or midpoint of mainline**
Other bottom fishing gears	corals or sponges > more than thresholds to be assigned by SIOFA secretariat	move at least 1 nautical mile

Remark: *unit of corals and sponges means either one litre of those VME indicator organisms that can be placed in a 10-litre container, or one kilogram of those VME indicator organisms that do not fit into a 10-litre container

**mainline length of 1,200 meters

Following the threshold and move-on rule stated in table 9, **there was no threshold triggered in 2024**. The average VMEs reported was 1.83 kg/haul. The detail of VME quantities is presented in Table 10 and 11.

Table 10: Recorded quantities (kg) of VME from logbooks, 2020-2024

Gear	VME group	Year				
		2020	2021	2022	2023	2024
Trawl	Sponges	308	710.7	1,251.4	60.35	401
	Corals + other VMEs	0.02	21	54.1	1	12
Handline	Sponges	0	0	0	0	0
	Corals + other VMEs	10	0	0	0	0

Table 11: VME taxa bycatch quantities (kg) per gear from logbooks data in 2024

Taxa	Gear	Trawl	Handline
	total set/tow number	226 hauls	95 days
DMO	Demospongiae	401	0
AZN	Anthoathecatae	2	0
CSS	Scleractinia	10	0

Biological sampling and length/age composition of catches

The scientific observers are responsible for collecting scientific data, including catch composition, length of target species, biological information of marine organisms, and other data requested by the Department of Fisheries. However, only length measurement is available due to the characteristic of trawl catches and limited working space onboard vessels. The size measurement was conducted only for target species. Table 12 shows the number of fish sampled annually for length measurement from 2020 to 2024. The length distribution of the sampled species are shown in Figure 8 - 15.

Table 12 Summary numbers of fish sampled per species and year

Species (FAO code)	**Years**				
	2020	**2021**	**2022**	**2023**	**2024**
LIB	L/F: 5,327	L/F: 9,721	L/F: 9,690	L/F: 5,096	L/F:1,256
	BS: -	BS: -	BS: -	BS: -	BS: -
KZJ	L/F: 8,558	L/F: 11,894	L/F: 12,427	L/F: 4,490	L/F:2,904
	BS: -	BS: -	BS: -	BS: -	BS: -
DCC	L/F: 1,014	L/F: 6,952	L/F: 5,455	L/F: 4,237	L/F:84
	BS: -	BS: -	BS: -	BS: -	BS: -
RUS	L/F: 13,511	L/F: 19,751	L/F: 14,582	L/F: 4,411	L/F:4,358
	BS: -	BS: -	BS: -	BS: -	BS: -
NGU	L/F: 3,306	L/F: 200	L/F: 751	L/F: 2,163	L/F:3,073
	BS: -	BS: -	BS: -	BS: -	BS: -
LJB	L/F: 225	L/F: 32	L/F: 93	L/F: 120	L/F:316
	BS: -	BS: -	BS: -	BS: -	BS: -
EMN	L/F: 65	L/F: 128	L/F: 65	L/F: 57	L/F:18
	BS: -	BS: -	BS: -	BS: -	BS: -
AVR	L/F: 171	L/F: 65	L/F: 59	L/F: 68	L/F:195
	BS: -	BS: -	BS: -	BS: -	BS: -
Total	L/F: 38,417	L/F: 48,743	L/F: 43,122	L/F: 20,642	L/F:12,204
	BS: -	BS: -	BS: -	BS: -	BS: -

Remark: L/F: length/frequency counts, BS: complete individual biological sampling

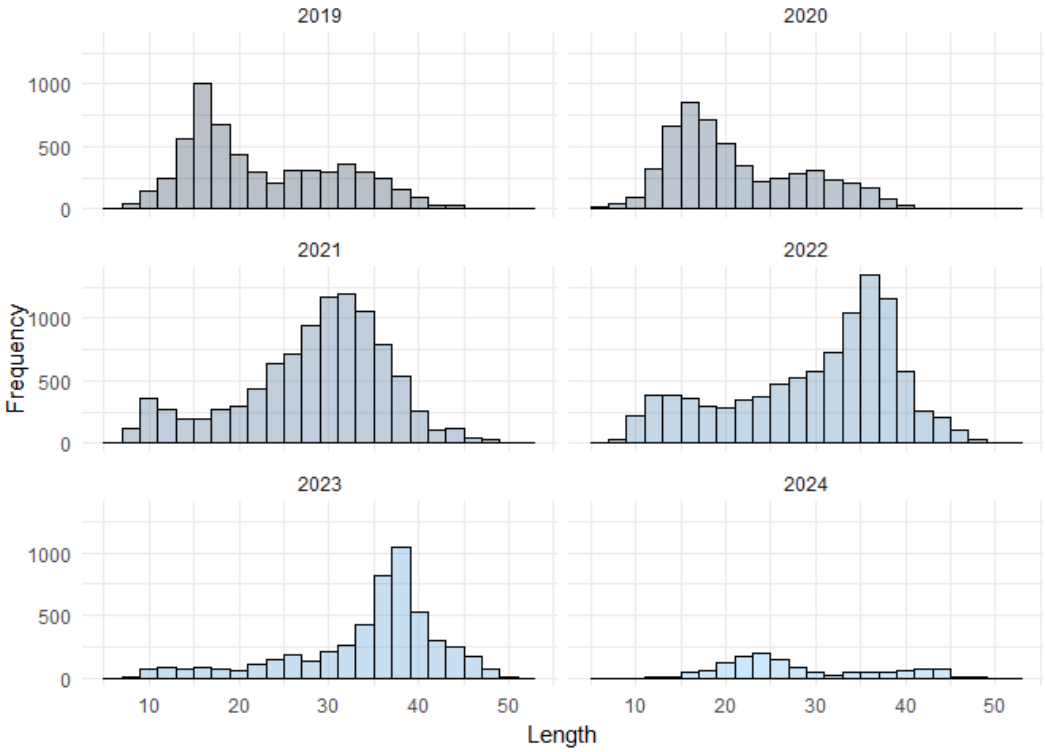

Figure 8: Length composition of *Saurida undosquamis* (brushtooth lizardfish) collected by scientific observers in 2019 – 2024

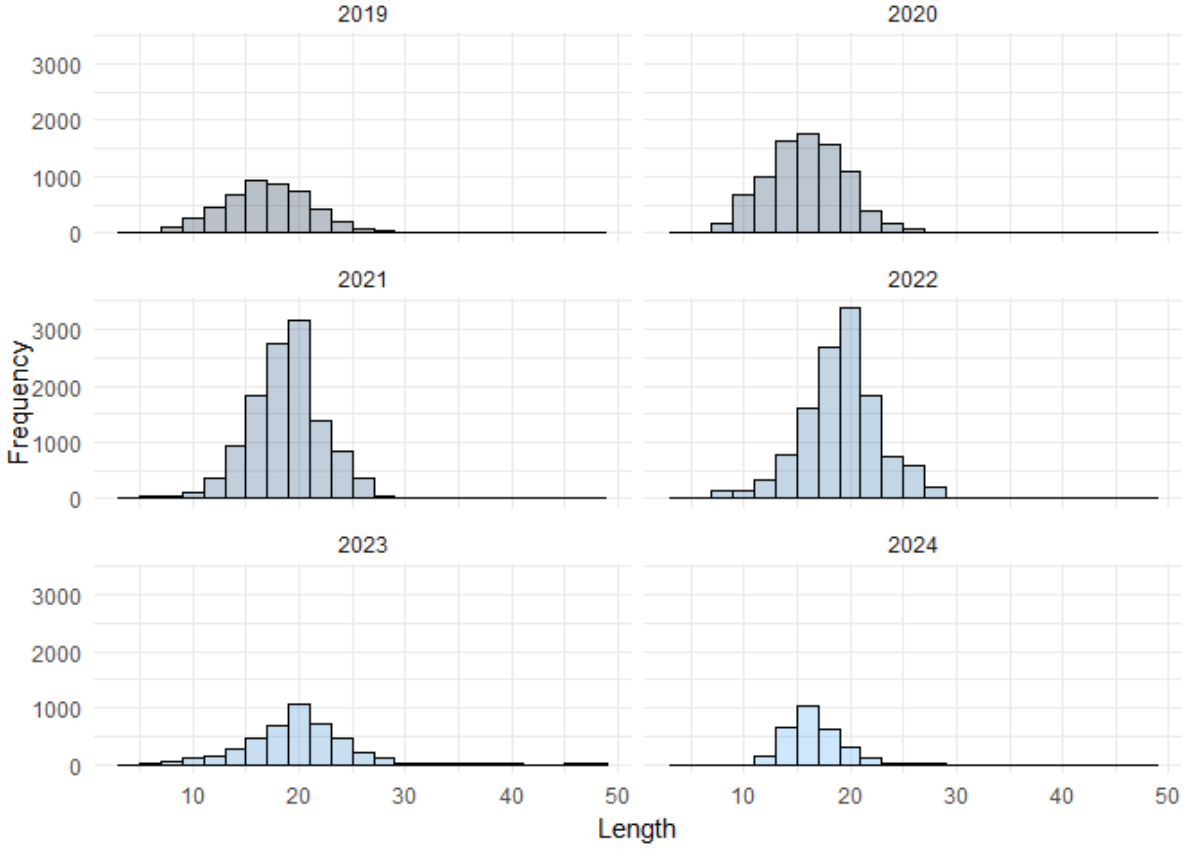

Figure 9: Length composition of *Nemipterus bipunctatus* (Delagoa threadfin bream) collected by scientific observers in 2019 - 2024

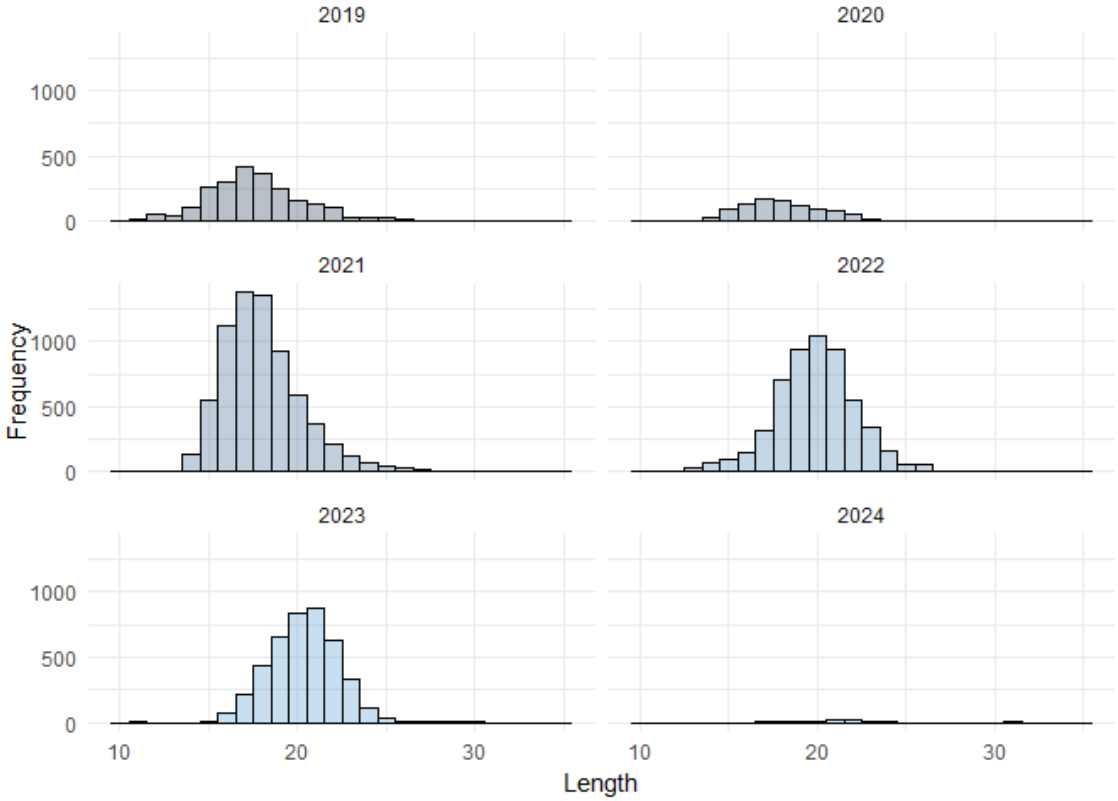

Figure 10: Length composition of *Decapterus macrosoma* (shortfin scad) collected by scientific observers in 2019 – 2024

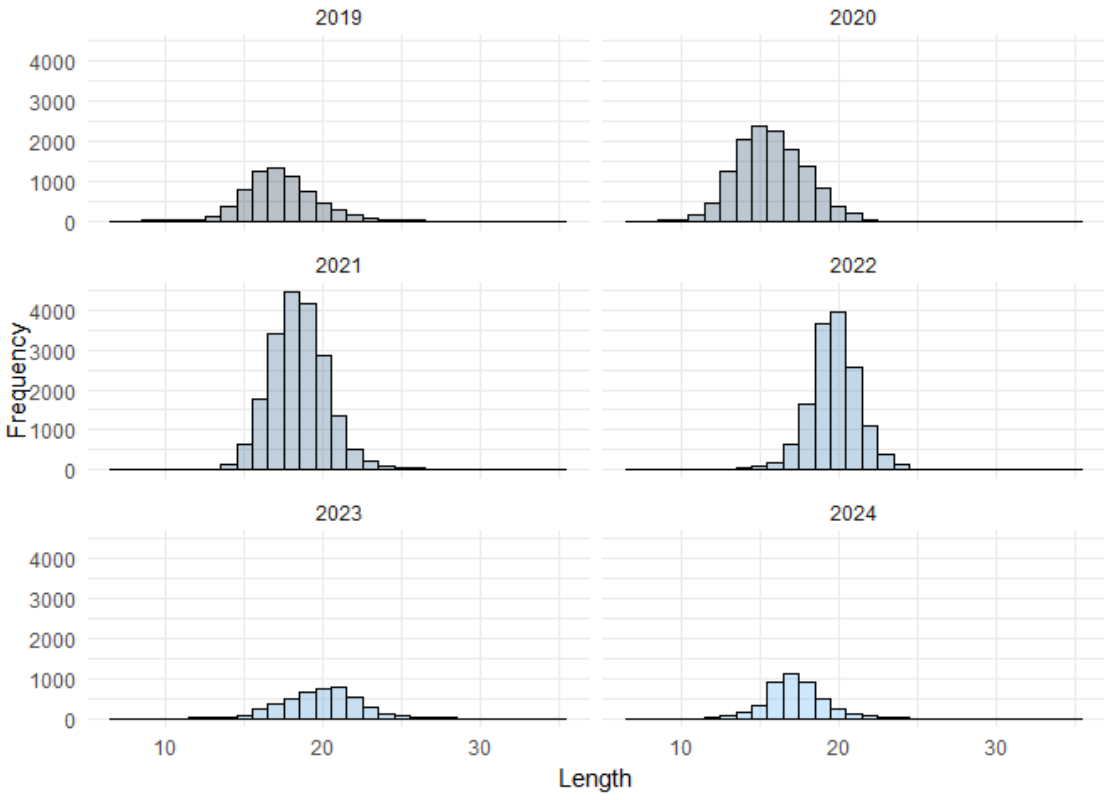

Figure 11: Length composition of *Decapterus russelli* (Indian scad) collected by scientific observers in 2019 - 2024

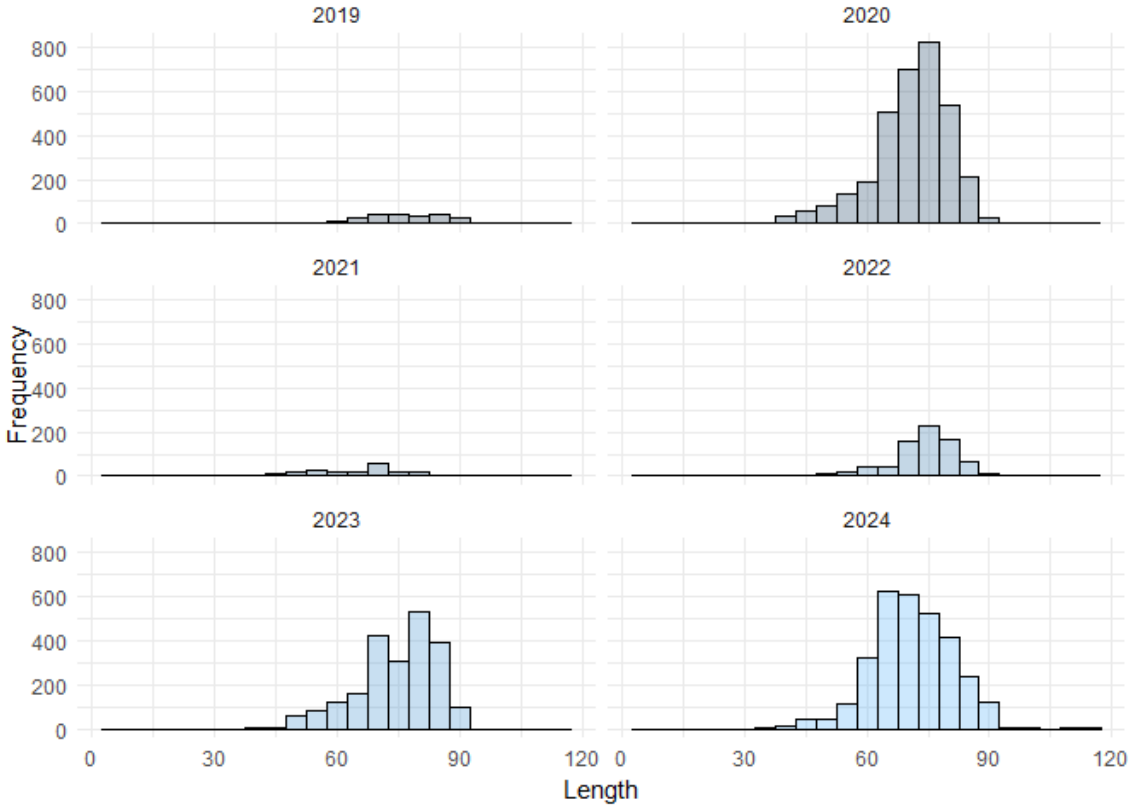

Figure 12: Length composition of *Carangoides fulvoguttatus* (Yellowspotted trevally) collected by scientific observers in 2019 - 2024

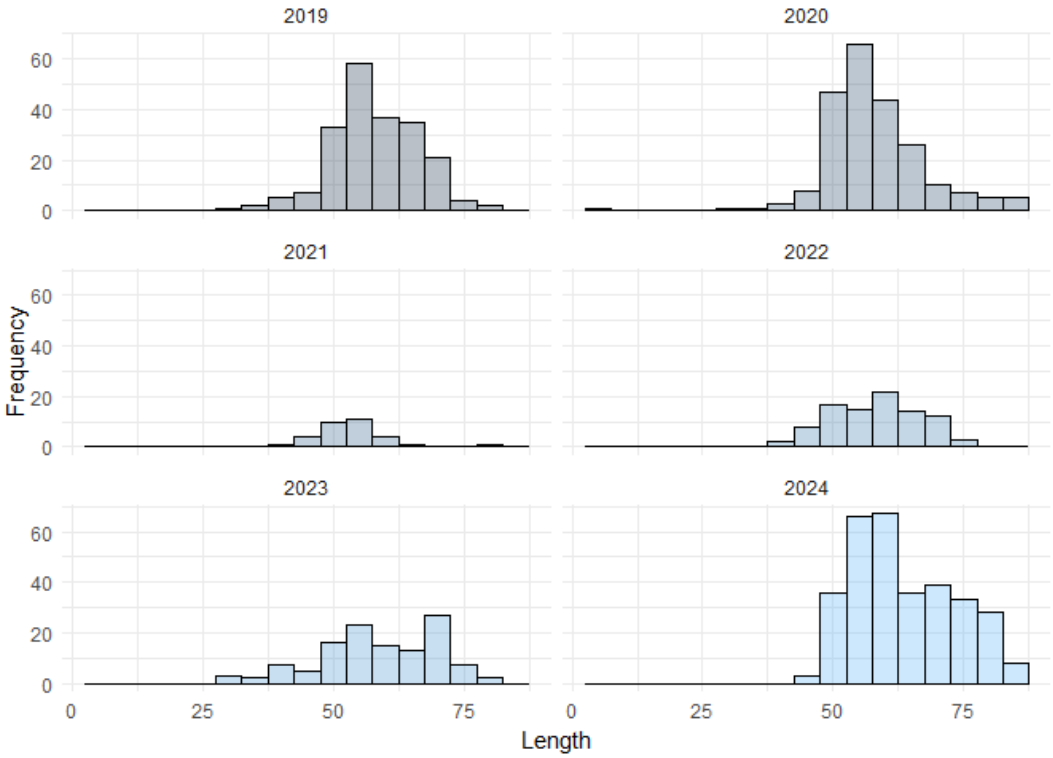

Figure 13: Length composition of *Lutjanus bohar* (two-spot red snapper) collected by scientific observers in 2019 - 2024

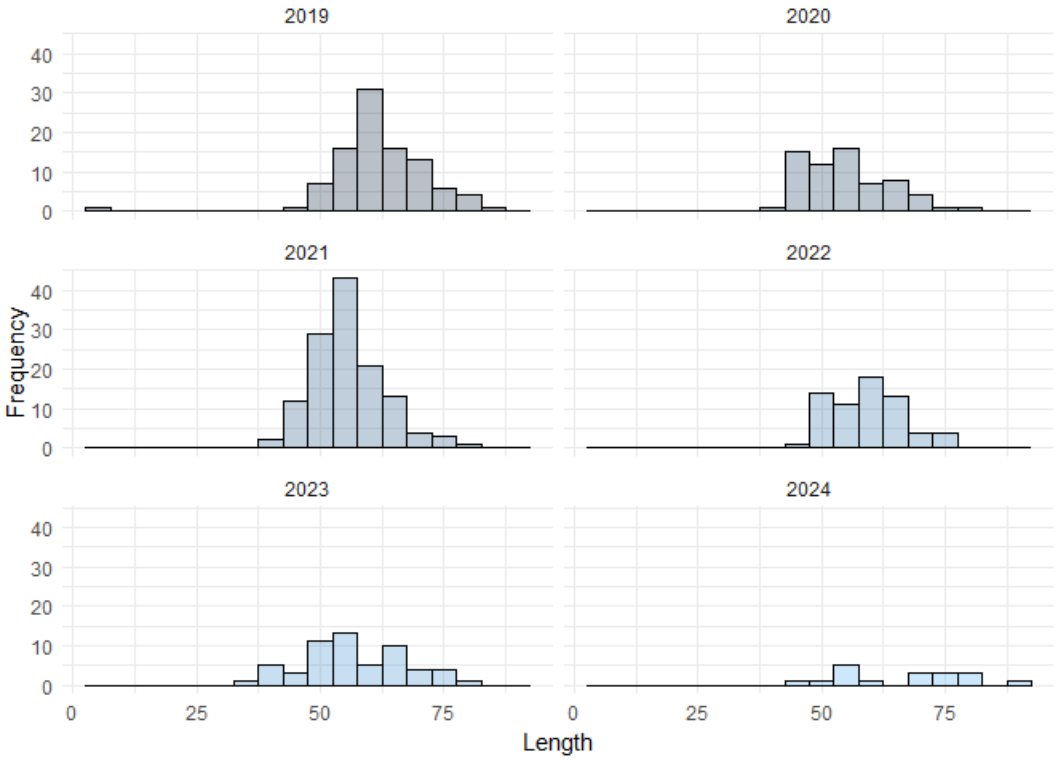

Figure 14: Length composition of *Plectropomus punctatus* (marbled coral grouper) collected by scientific observers in 2019 - 2024

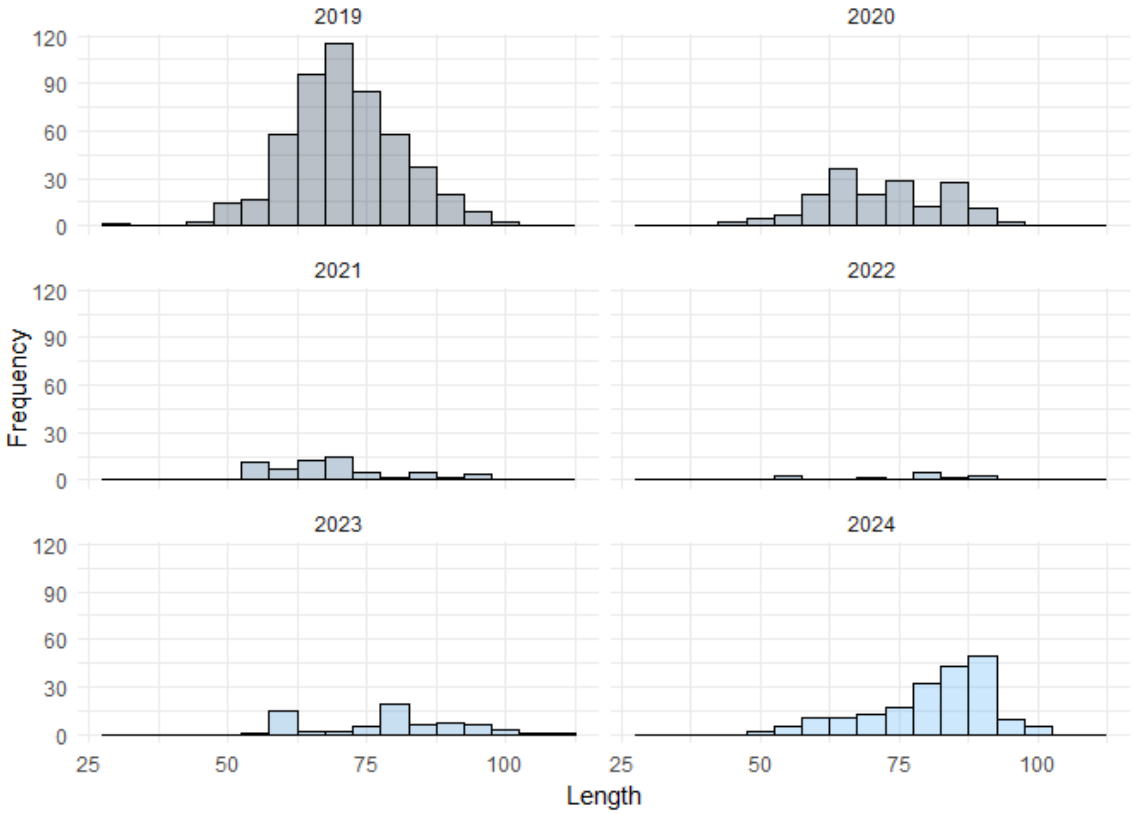

Figure 15: Length composition of *Aprion virescens* (green jobfish) collected by scientific observers in 2019 – 2024

Description of data verification mechanisms

Fishing activities of vessels

Fishing activities are recorded both on paper (fishing logbook) and digitally recorded via Electronic Reporting System (ERS). The recorded details include date and time of fishing, fishing efforts, catch, and fishing locations. Vessel masters are required to record fishing activities on haul-by-haul basis in the fishing logbook and submit these records upon docking at Thai ports. Additionally, captains are requested to report every fishing operation daily through the ERS, which is currently available for trawl and handline fishery. The Electronic Monitoring System (EM), which uses video recordings, is also in place to cross-check the actual fishing activities with the data reported in the logbook and ERS. The logbook, ERS-reported data, and video records are verified by the Department of Fisheries.

Position verification through VMS

All authorized fishing vessels operating in the SIOFA area are required to install Vessel Monitoring System (VMS), which transmits signals every hour. A VMS backup unit is reserved on board to ensure continuous monitoring in the event of a primary VMS signal disruption. Real-time monitoring is carried out by the Department of Fisheries.

Scientific observer programs

The scientific onboard observer program is implemented to collect scientific data on fishing operation, catch and discard, catch composition at finest taxonomic level, biological data of important species, and observation of incidental bycatch and vulnerable species. Observers are also assigned to monitor and record transshipment activities at sea. This ensures that the information is consistent with the data recorded by vessel masters or captains. The Department of Fisheries is responsible for the scientific onboard observer program and the verification of scientific data.

Port sampling

The Department of Fisheries is responsible for inspection at ports upon departure and landing. Port inspectors are tasked to verify documents and to conduct physical inspections for port entry and exit permissions. Landed catch is inspected and cross-checked with the fishing logbook to ensure the reliability and accuracy of catch information before it enters the supply chain. The Marine Catch Transshipment Document (MCTD) is recorded in cases of transshipment happened. Data verification mechanism diagram is presented in Figure 8.

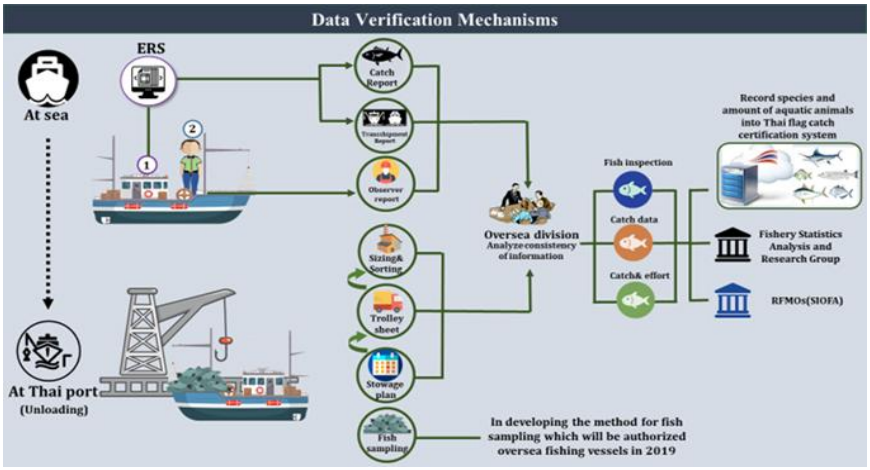

Figure 8 Mechanism for verifying data from Thai-flagged overseas fishing vessels

Summary of observer and port sampling programs

Thailand has implemented scientific observer program since 2019. The scientific observers are trained by the Department of Fisheries, covering basic training of seaman, fisheries management, legal and policy framework, health and safety, observer code of conduct, fishing gears, fishery data collection, and related topics, e.g. navigation and radio communication.

Onboard observers are responsible for collecting scientific data, including fishing gear details, fishing effort, catch and discard, catch composition, incidental bycatch, VMEs, length measurement of target species, and other scientific data requested by the Department of Fisheries. There are ten (10) active scientific onboard observers in 2024.

As stated in overseas fishing legislation, all Thai overseas fishing vessels operating in the SIOFA area are requested to have onboard observers to monitor fishing and transshipment activities under the following conditions:

- Trawlers must have onboard observers for the entire duration of the trip (100% coverage)
- Other bottom fishing gears, including handline, must have onboard observer covering at least 20% of operations in any calendar year.
- Every transshipment activity must be observed by onboard observers

The scientific observer program ran smoothly in 2024. A summary of the observer program for 2024 is presented in Table 14. Note that sampling coverage refers to instances where observers conducted biological sampling (length measurement) during fishing operations.

Table 14: The scientific observer program summary in 2024

description /gear	**Trip coverage (%)**	**Total number of sets/hauls**	**Number of sets/hauls covered**	**Observing coverage (%)**		**Incidental bycatch observation coverage (seabirds and mammals) (%)**
Trawl	100%	226 hauls	Covered 226 hauls	100% observed	35.84% sampling	100%
Handline	100%	95 Fishing days	Covered 95 Fishing days	100% observed	100% sampling	100%

In 2024, a total of 536.3 kg of bycatch (49 individual) was reported, with the majority coming from trawl operations. There are two sea turtles caught by trawl but they were released alive. There was no report of seabird being caught or interacting with fishing gears, both trawl and handline. The detail of reported bycatch is shown in Table 15.

Table 15: Reporting of observed bycatch from otter board trawl and handline in 2024

Group	**Taxon**	**Trawl**	**Handline**
Seabird	*	*	*
Marine mammals	*	*	*
Turtles	*Dermochelys coriacea*	200 kg (1 individual)	*
	Eretmochelys imbricata	60 kg (1 individuals)	*
	Alopias pelagicus	10.20 kg (1 individual)	*

Group	Taxon	Trawl	Handline
Shark, rays and skates	*Galeocerdo cuvier*	3.00 kg (1 individual)	*
	Aetomylaeus vespertilio	30.00 kg (1 individual)	*
	Rhina ancylostoma	126.00 kg (3 individuals)	*
	Sphyrna lewini	96.40 kg (38 individuals)	*
	Sphyrna mokkarran	10.70 kg (3 individuals)	*
Tuna & tuna like species	*	*	*
Total		536.30 kg (49 individual)	*

Remark *no encounters