14th INDONESIA TUNA FISHERIES ANNUAL CATCH ESTIMATES WORKSHOP
30-31 May 2023
Harris Hotel Sentul City – Bogor

RECOMMENDATION

1. The workshop noted the significant value of having an initial technical meeting between the Directorate General of Capture Fisheries (DGCF), Centre for Data Statistic and Information (CDSI/PUSDATIN), National Research and Innovation Agency (BRIN), and Western and Central Pacific Fisheries Commission (WCPFC). The initial meeting is still required to prepare the estimates for review at the main workshop. It recommended annual two-day initial meetings to prepare catch estimates to be conducted yearly. The WCPFC Representative needs to attend a two-day offline meeting before the ITFACE WS to have a brief introduction when possible**. (retain**)
2. The workshop recommended a continuation and strengthening of collaboration between DGCF, PUSDATIN, BRIN and relevant stakeholders that provide a range of data used under the One Data system to produce estimates. The other data sources/stakeholders are needed to support the data validation conducted by the MMAF. The data sources include CFR/WPEA data, SILOPI (Logbook/e-Logbook), Licence data, Catch Certification, Export Data, Observer, Port Sampling, SIMKADA, PIPP, as well as data from fishery associations and NGOs such as MDPI, AP2HI, YKAN and YII. The collaboration between DGCF, PUSDATIN, National Research and Innovation Agency (BRIN), and relevant stakeholders continue to support the data validation by the MMAF. It is essential to acknowledge and follow the schedule/timeline for the data collection so that the data verification by each data provider can be done earlier (before May). It is encouraged for the validation process by the provincial government to involve the NGOs/associations and other relevant data providers. (**retain**)

3. The workshop noted some progress to clarify several issues in the 2020 (carried over from ITFACE-12) catch estimates presented by PUSDATIN and recommended the investigation of each topic by relevant stakeholders (PUSDATIN, BRIN, DGCF, fisheries associations, NGOs). The progress is as stated following:

   a. The **<u>2017-2018 catch estimates</u>** from the Prep ACES (17-18 June 2021) will be reviewed by PUSDATIN by 2023
   b. PUSDATIN will review the 2019 and 2020 POLE-AND-LINE fishery catch estimates presented by One Data in 2023
   c. A review of the inconsistency in the total tuna annual catch estimates for the **<u>TROLL fishery</u>** for years 2017-2019-2020 as carried over from the ITFACE-11– Rec. 3d could not be discussed during ITFACE-13 and considered to be addressed in the following ITFACE or other data workshops.

d. Regarding the (4-fold) increase in the **GILLNET fishery** catch in 2018 compared to recent years, no on-site visit was conducted in preparation for the 2022 catch estimates due to the COVID-19 pandemic. It was strongly recommended to perform on-site visits and landing sites in the GILLNET fishery [Carried over from ITFACE-11– Rec. 3e].

4. The ITFACE-13 recommends [carried over]:
   On the HANDLINE fishery in FMAs 716-717 and the high seas:
   1) The total handline tuna catch and catch composition from Biak Numfor must be clarified further to the enumerators, and a ground check is strongly needed. It will be conducted by the DGCF, BRIN, PUSDATIN, MDPI and AP2HI. **[Done][First visit conducted by PSDI on August 2022, but need to have more investigation by Secretariat of DGCF]**
   2) The total tuna catch of handline in the FMAs 716-717, specifically for Biak Numfor, is using the data from the previous year (2020 data).
   3) Recommends to seek the possibility of implementing a port sampling program in Biak Numfor after the ground checking [

5. Regarding the tuna species catch composition data, it has been informed by the data provider that the meeting acknowledged the benefit of tuna species catch composition data summaries provided by other participating government agencies, NGOs, and associations. (**Retained**)

6. No on-site visit was conducted in preparation for the 2022 catch estimates due to the COVID-19 pandemic. Furthermore, the transition period for scientists to move to BRIN impacts accessibility to any funds from the government or any projects. The meeting noted changes in estimates for certain gears and areas between 2020 and 2021 and recommended that PUSDATIN, DGCF, and BRIN investigate the sources of the catch estimates to help explain these changes, in particular (**carry over**),

   a. Investigate the source of the increased POLE-AND-LINE catches in FMAs 713/714/715 (if possible, validate the catches from the key landing sites with other data sources).
   b. Investigate the source of the increased GILLNET catches in FMAs 716/717 from the landing sites Jayapura, Kota Jayapura, Nabire and Sarmi.
   c. Investigate the source of the OTHER GEARs catches in FMAs 716/717 for the large bigeye tuna catch from the RAWAI DASAR and other gears.

7. In ITFACE-12, DGCF and BRIN endeavour to disseminate the SDI definitions of fish names are recommended to be implemented through an appropriate website tool to all stakeholders in the fishery. In 2022, the master data still needs to be reviewed to ensure compatibility with the official document; it is expected to have a revised version in 2023. Regarding the master data, starting from 2021, PUSDATIN is the data custodian (for the whole data relating to the MMAF (i.e., fish name, fishing port name, fisheries management area).

8. ITFACE-14 acknowledges the need to **continue** the deployment of observer for longline fisheries in the IFMAs to have better data coverage.

9. The workshop recommends including WCPFC key shark species data (in number/weight by species for longline logbook) in the WCPFC logbook data submission.

10. The workshop recommends the Frame survey concept presented by YKAN be investigated for use in the catch estimation process. YKAN was tasked to prepare a presentation for ITFACE-15 to explain the requirements for Frame Survey data collection and how it can be used in the catch estimation and data validation processes.

11. The workshop acknowledged that 2022 catch estimates for some gears had issues which could not yet be resolved, and so recommended that DGCF Secretariate carry over the 2021 catch estimates for these as provisional 2022 catch estimates.

12. It was recommended that DGCF/ PSDI consider the inclusion of estimates of coverage of logbook data by Gear and AWs/EEZ in future presentations.

13. It was recommended that DGCF Secretariate and other relevant agencies review the landing areas/ports where there appear to be anomalies, including:

    a. HANDLINE 716 - 717 (Biak Numfor, Donggala, Morotai)
    b. POLE AND LINE - 713, 714, 715 - IAW (Bacan, Bitung, Flores Timur)
    c. TROLL LINE 716 - 717 (Jayapura, Biak Numfor, Manokwari)
    d. TROLL LINE - 713, 714, 715 - IAW (Ternate, Maluku Tengah, Seram bagian barat)
    e. GILLNET - 713, 714, 715 - IAW (Bulukumba, Maluku Tenggara, Karangasem, Minahasa, Polewali Mandar, Wajo)
    f. OTHER GEARS 713, 714, 715 - IAW (Minahasa Tenggara, Bitung)

14. It was recommended that BRIN, in collaboration with WCPFC/SPC, consider an independent assessment to validate the length data collected through the YKAN CODRS initiative and if these data are valid, they should be included in the national tuna size data holdings and included in the Size data submission to the WCPFC. Some suggestions for the study include:
    a. Considering paired sampler data collection to validate the CODRS data;
    b. Comparison of monthly size data by gear, AWs/EEZ and species from other data sources (e.g., WPEA).
15. WCPFC/SPC in collaboration with Pak Bayu consider developing a tool (using Shiny R or other web framework) that can be used by DGCF Secretariate to generate the following:
    a. estimates of vessel numbers by gear, based on the catch estimate provided for a district/landing area, and
    b. estimates of tuna catch by gear, based on data for vessel numbers for a district/landing area.

    This tool will use information including average CPUE by gear, average days fishing per year, obtained from WPEA and other data sources to estimate catch and vessel numbers. This

tool can then be used in the tuna catch estimates validation process conducted by DGCF Secretariate to identify unrealistic estimates.

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DAFTAR HADIR / ATTENDANCE LIST

TANGGAL & TEMPAT / DATE & VENUE : 30 mei 2023, Haris Hotel City Sentul Bogor.

NAMA KEGIATAN / EVENT : The 14th Indonesian Annual Tuna Fisheries Catch Estimates review workshop.

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TANGGAL & TEMPAT / DATE & VENUE : 30 mei 2023 / Haris Hotel Sentul City Bogor

NAMA KEGIATAN / EVENT : The 14 Indonesian Annual Tuna Fisheries Catch Estimates Review Workshop

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NAMA KEGIATAN / EVENT : The 19 Indonesian Annual Tuna Fisheries Catch Estimates Review Workshop.

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TANDA TERIMA/CASH RECEIPT

TANGGAL & TEMPAT / DATE & VENUE : 30 Mei 2023 / Harris Hotel Sentul City Bogor

NAMA KEGIATAN / EVENT : The 14 Indonesia Annual Tuna Fisheries Catch Estimates Review Workshop.

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7					
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9					
10					

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DAFTAR HADIR / ATTENDANCE LIST

TANGGAL & TEMPAT / DATE & VENUE : 31 Mei 2023, Harris Hotel City Sentul Bogor

NAMA KEGIATAN / EVENT : The 14 Indonesian Annual Tuna Fisheries Catch Estimates Review Workshop.

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NAMA KEGIATAN / EVENT : The 14th Indonesian Annual Tuna Fisheries Catch Estimates Review Workshop

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BRIN
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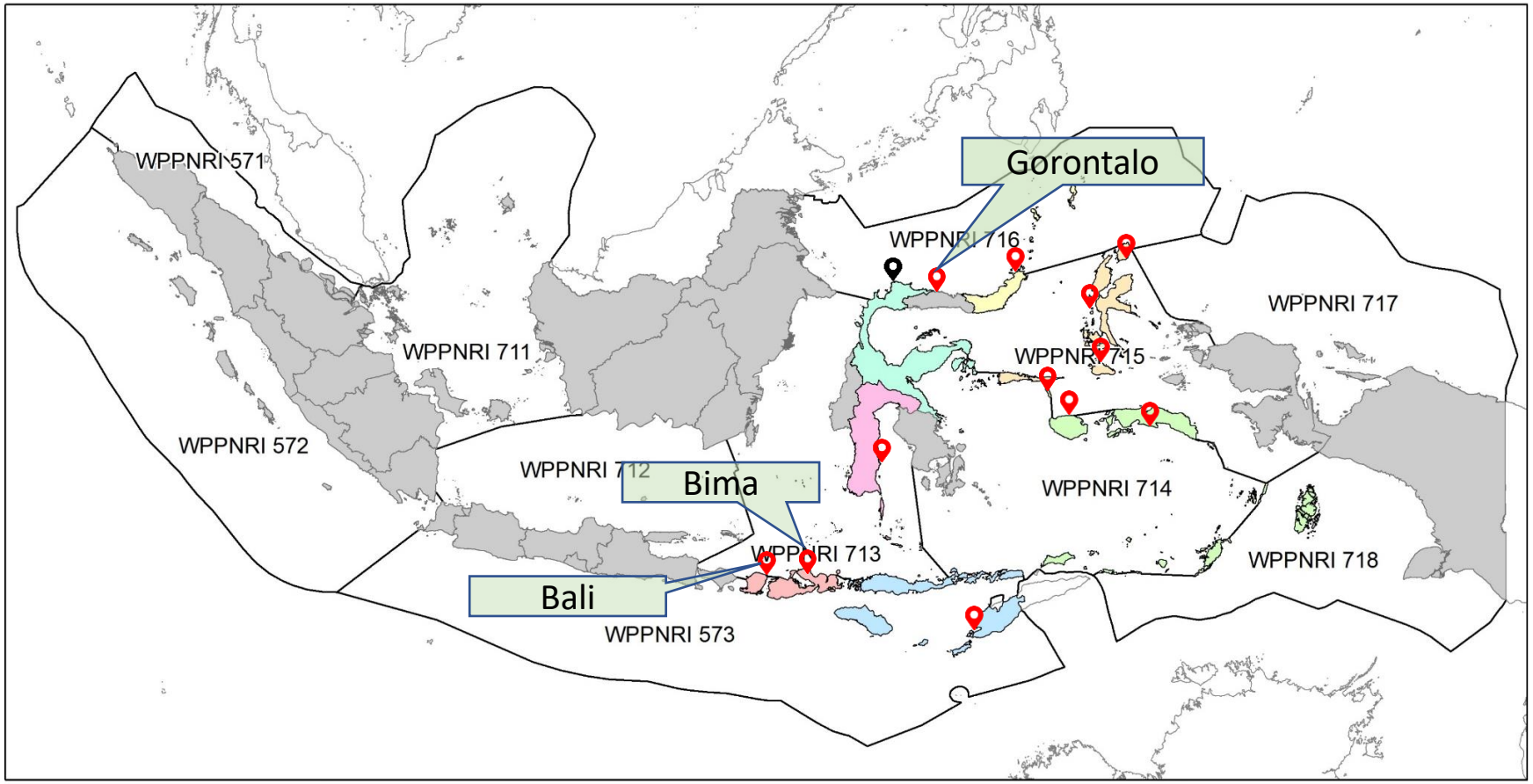
THE 14TH
INDONESIAN ANNUAL TUNA FISHERIES
CATCH ESTIMATES REVIEW WORKSHOP
Bogor, Jawa Barat • 30-31 Mei 2023

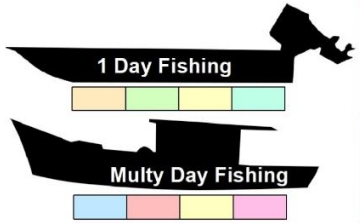
Program Pengumpulan Data Perikanan Tuna Berbasis Port Sampling Pada Kapal Handline Tuna Tahun 2022

Dipersipakan oleh : Timur, Novi dan Kai

Indonesian Annual Tuna Fisheries Catch Estimate Review 14
Bogor, 30-31 Mei 2023

Lokasi Kerja MDPI Tahun 2022 - 2023





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Kota Kupang:
- PPI Oeba

Prov. NTB
Kab. Lombok Timur
PPI Labuhan Lombok

Prov. SULUT
Kota Manado
- Pasar bersehati
Kab. Minahasa Utara
- Minaesa

Prov. SULTENG
Kab. Tolitoli:
- Salumpaga

Prov. SULSEL
Kab. Bone:
- Lapacee
- Lonrae
- Tipulue
- Cumpae

Prov. Maluku Utara
Kab. Pulau Morotai :
- Daeo
- Sangowo

Kota Ternate :
- Kmp. Makasar Timur
- Jambula

Kab. Sula:
- Desa Bajo

Kab. Halmahera Selatan
- Madapolo Timur
- Madapolo Barat
- Waringi, Bahu

Prov. Maluku
Kab. Buru :
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- Waelihang
- Waprea
- Wamlana
- Waepure
- Tj. Karang
- Tl. Bara

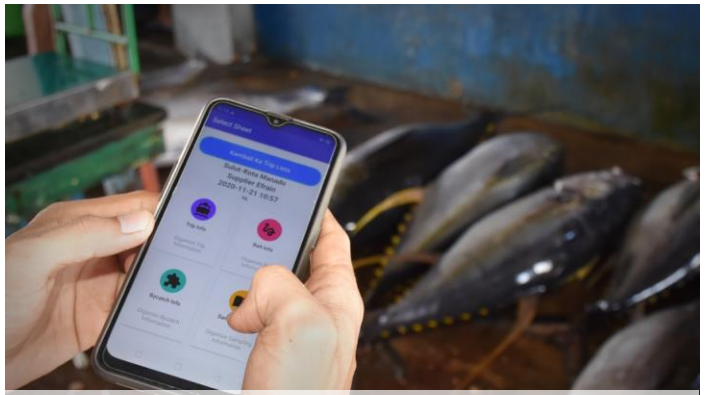
Kab. Maluku Tengah :
- Liang
- Rutah
- Yainuelo
- Tamilow
- Haya
- Tehoru
- Teluti
- Wahai

Jenis kapal pada program port sampling

JENIS DATA YANG DIKUMPULKAN MELALUI PORT SAMPLING
(untuk setiap kapal)

- **Data operasional**
  Lama hari memancing, lama trip, penggunaan BBM, penggunaan es
- **Daerah tangkapan**
- **Data penggunaan umpan**
- **Tangkapan sampingan**
- **Jenis, Panjang, Berat tuna**
- **Informasi terkait interaksi ETP**
- **Data hasil tangkapan bulanan**
- **Informasi umum kapal**
- **Estimasi harga**

Proses pengumpulan data di lapangan Berdasarkan Protokol Handline Tuna



Pencatatan langsung pada I-Fish App

Port sampling : 20% dari landing place supplier mitra

Penempatan di remote area

Tim lapangan ditempatkan langsung di desa potensial tuna yang remote area

Tinggal bersama dengan komunitas nelayan

Tim MDPI tinggal dan berkantor di desa pesisir, langsung di tengah masyarakat sehingga pengumpulan data lebih efektif

Sampling data biologi : Panjang, berat dan identifikasi spesies tangkapan

Metode ikan tuna kecil < 10 kg :

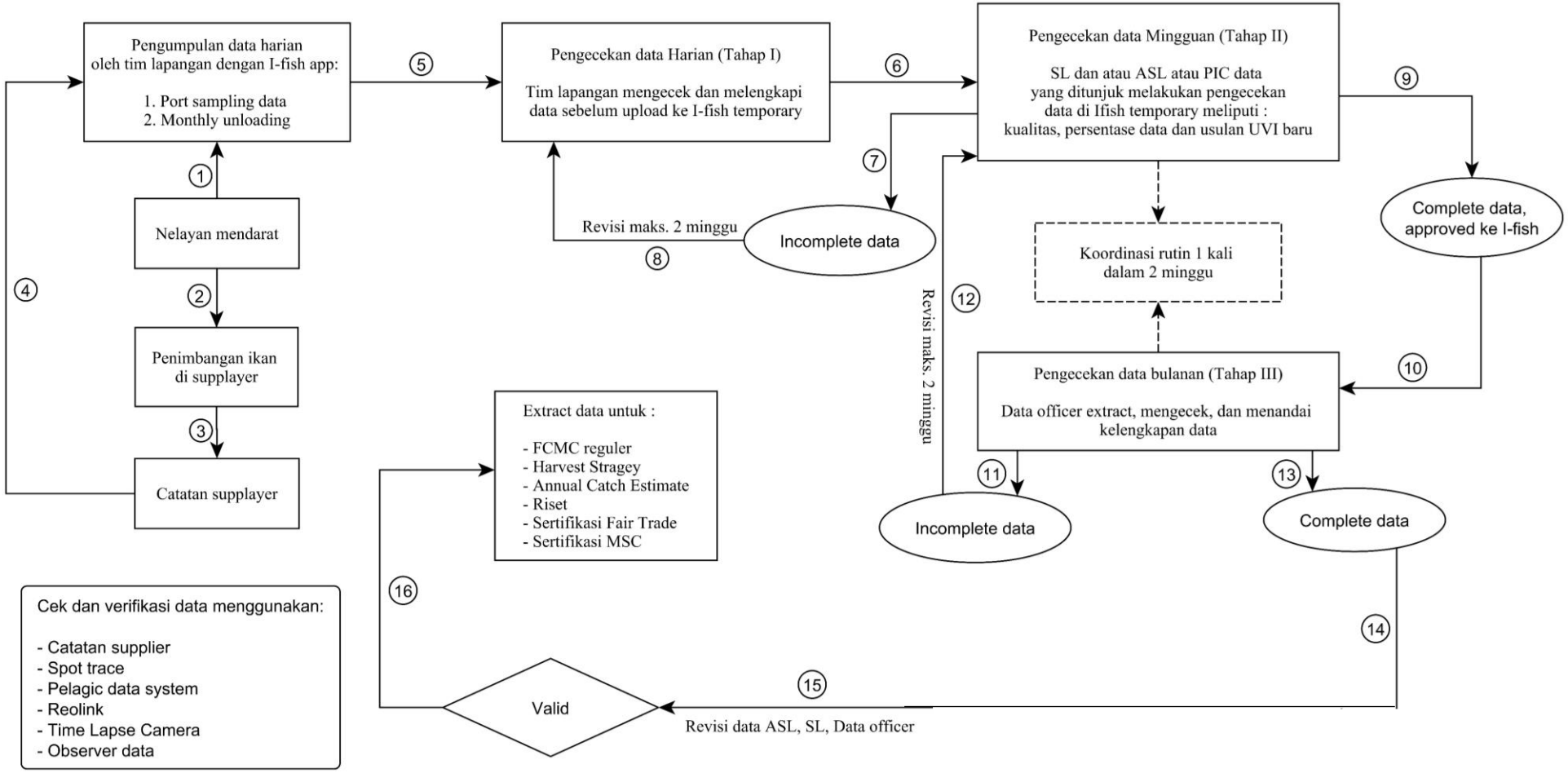
- Sampling acak pada keranjang interval 5 sampai 200 ekor (Pada kapal Multi day Fishing trip)
- Sampling 10 ekor setiap spesies (Pada Kapal One day fishing)

Tuna besar > 10 kg :

- Mengukur panjang cagak dan berat utuh
- Mengukur panjang loin dan berat loin

Interview oprasional penangkapan dan ETP

FLOW DATA I-FISH



Verification | Validation | Supervision | Validation

- **Hasil Pengumpulan Data 2022**

Jumlah Trip Port Sampling Data tahun 2022

WPP NRI	No. Trips sampling	Lama trip	Lama hari memancing
WPPNRI 713	56	663	565
WPPNRI 714	822	1182	1102
WPPNRI 715	1912	2033	1970
WPPNRI 716	48	70	66
Total	2.838	3.948	3.703

Komposisi Tangkapan Tuna Tahun 2022

Komposisi Tangkapan Tuna Kecil (<10 kg)

WPP	BET (kg)	SKJ (kg)	YFT (kg)	Total (kg)	BET (%)	SKJ (%)	YFT (%)
WPPNRI 713	1199.56	5645.88	10573.56	17,419	6.9%	32.4%	60.7%
WPPNRI 714	424.05	3,500.22	6,058.03	9,982.3	4.2%	35.1%	60.7%
WPPNRI 715	145.46	11,581.97	14,444.77	26,172.2	0.6%	44.3%	55.2%
WPPNRI 716		408.28	280.73	689.01	0%	59.3%	40.7%
Total	1,769.07	21,136.35	31,357.09				
Persentase	3.3%	39%	57.8%				

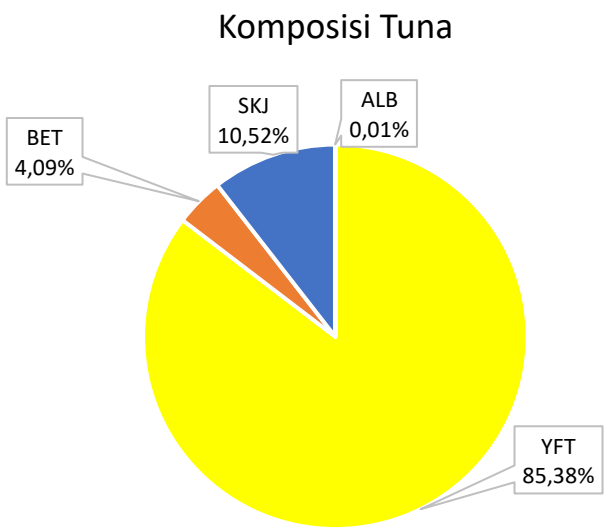
Komposisi Tangkapan Tuna Besar (>10 kg)

WPP	ALB (kg)	BET (kg)	YFT (kg)	Total (kg)	ALB (%)	BET (%)	YFT (%)
WPPNRI 713	0	2778	24324	27102	0	10.25	89.75%
WPPNRI 714	0	2763	45871	48634	0	5.68%	94.32%
WPPNRI 715	14.12	917	66409.09	67340.21	0.02%	1.36%	98.62%
WPPNRI 716	0	0	3205	3205	0	0	100%
Total	14.12	6458	139809.09				
Persentase	0.01%	4.41%	95.58%				

Komposisi Jenis Tuna Tahun 2022

Komposisi Gabungan Tuna kecil dan Tuna besar

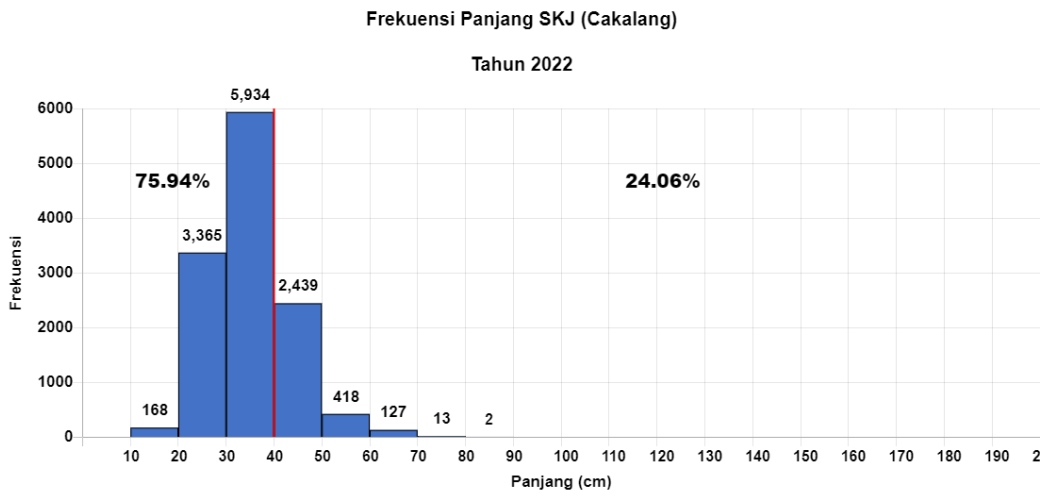
WPP	BET (kg)	SKJ (kg)	YFT (kg)	ALB (kg)	TOTAL (kg)	BET (%)	SKJ (%)	YFT (%)	ALB (%)
WPPNRI 713	3977.56	5645.88	34897.56	0	44,521	8.93%	12.68%	78.38%	0
WPPNRI 714	3187.05	3500.22	51928.99	0	58,616.26	5.44%	5.97%	88.59%	0
WPPNRI 715	1062.46	11582	81244.4	14.12	93,902.95	1.13%	12.33%	86.52%	0.02%
WPPNRI 716	0	408.28	3485.73	0	3,894.01	0%	10.48%	89.52%	0
Total	8,227.07	21,137	171,557	14.12	200,934.22				
Persentase	4.09%	10.52%	85.38%	0.01%					

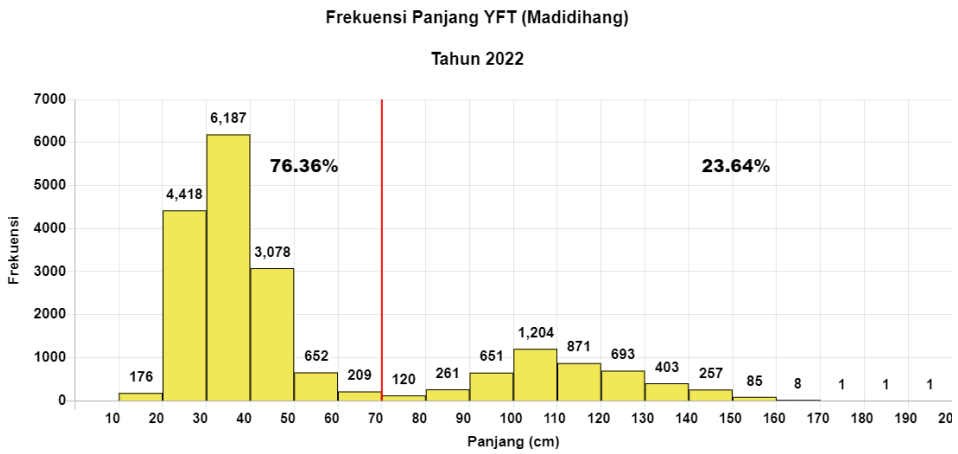


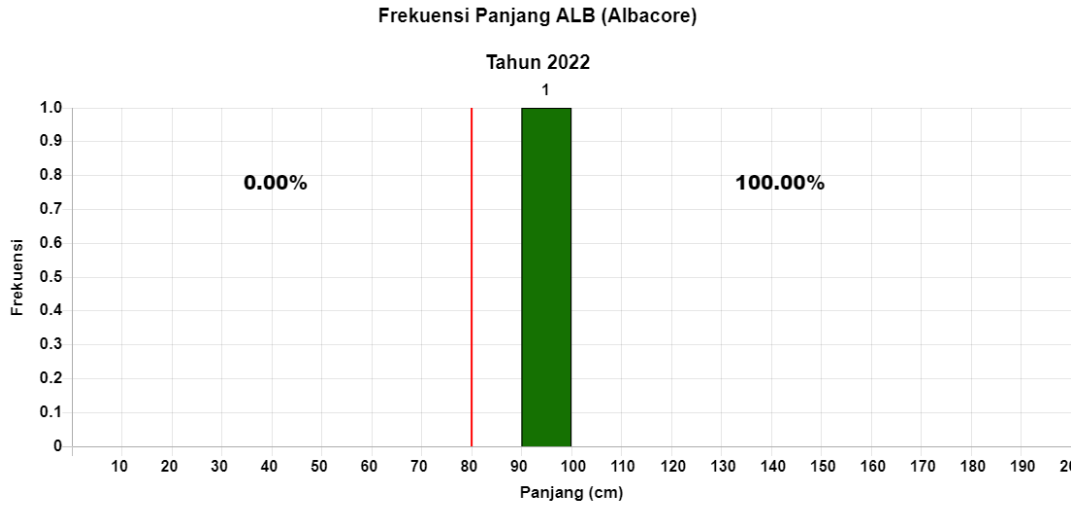
Data Tangkapan Lain Berdasarkan Port Sampling Data 2022

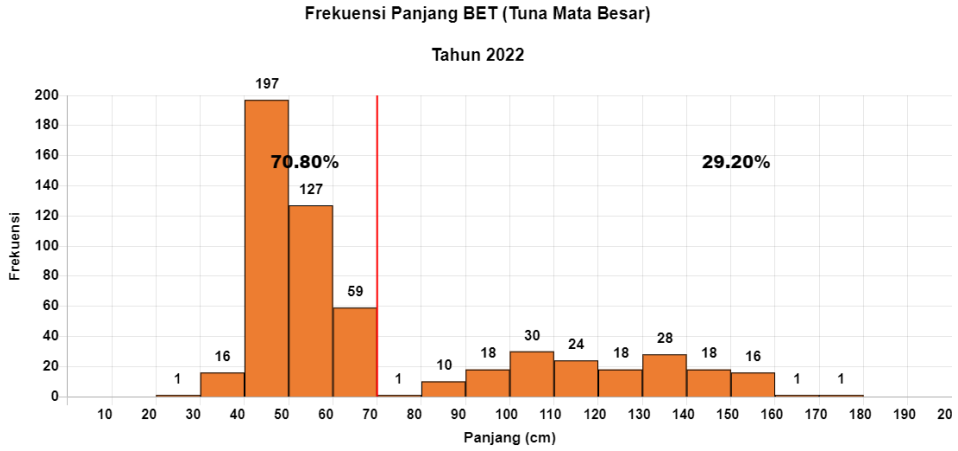
WPP	Billfish (kg)				Tongkol dan tenggiri (kg)					Hiu (kg)			Tangkapan lain (kg)
	BLM	BUM	SFA	SWO	KAW	FRI	BLT	WAH	GUT	FAL	BSH		
WPPNRI 713	355	538	41	594	0	0	0	33		62	69		575
WPPNRI 714	234	119.5	100	462	3.55	33.21	3.42	0		40	50		864.86
WPPNRI 715	0	50	0	0	56.6	866.21	847.75	36.92	4				2188.47
WPPNRI 716	0	0	0	0	2	10	0	0					199
Total	589	707.5	141	1056	62.15	909.42	851.17	69.92	4	102	119		3827.33

Length Frequency









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Happy People, Many Fish©

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Review of Progress on RECOMMENDATIONS from ITFACE-13

Putuh Suadela
Senior Fisheries Management Specialist

Directorate of Fish Resources Management
Directorate General of Capture Fisheries

No	Recomendation	Progress
1	The workshop recommended a continuation and strengthening of collaboration between DGCF, PUSDATIN, BRIN and relevant stakeholders that provide a range of data used under the One Data system to produce estimates.	Data collected and input by the district government using One Data system → validated by Provincial Gov → Validated by Central Government (DGCF) → national validation by PUSDATIN DGCF invited related stakeholder/data provider during the validation process → To be discussed during ITFACE14
2	The **2017-2018 catch estimates** from the Prep ACES (17-18 June 2021) will be reviewed by PUSDATIN by 2023	Waiting for the final validation for 2022 data. PUSDATIN → DGCF (KUSUKA to collect data on fishers/industries) → Carry over
3	PUSDATIN will review the 2019 and 2020 POLE-AND-LINE fishery catch estimates presented by One Data in 2023	Waiting for the final validation for 2022 data. PUSDATIN → DGCF → Carry over
4	A review of the inconsistency in the total tuna annual catch estimates for the **TROLL fishery** for years 2017-2019-2020 as carried over from the ITFACE-11– Rec. 3d could not be discussed during ITFACE-13 and considered to be addressed in the following ITFACE or other data workshops	Waiting for the final validation for 2022 data. PUSDATIN → DGCF → Carry over

No	Recomendation	Progress
5	Regarding the (4-fold) increase in the **GILLNET fishery** catch in 2018 compared to recent years, no on-site visit was conducted in preparation for the 2022 catch estimates due to the COVID-19 pandemic. It was strongly recommended to perform on-site visits and landing sites in the GILLNET fishery [Carried over from ITFACE-11– Rec. 3e]	No on-site visit was conducted in preparation for the 2023 catch estimates. → Carry over
6	On the HANDLINE fishery in FMAs 716-717 and the high seas: • The total handline tuna catch and catch composition from Biak Numfor must be clarified further to the enumerators, and a ground check is strongly needed. It will be conducted by the DGCF, BRIN, PUSDATIN, MDPI and AP2HI. • The total tuna catch of handline in the FMAs 716-717, specifically for Biak Numfor, is using the data from the previous year (2020 data). • There is no need to change the source of the database. • Recommends to seek the possibility of implementing a port sampling program in Biak Numfor after the ground checking	DGCF has visited Biak Numfor on August 2022, the findings are (1) misidentification, (2) Limited data on number small scale/artisanal vessels in Biak Numfor. → To be discussed during ITFACE14
7	To estimate the volume of catch for large handline and small handline within all the FMAs	Several activities had been conducted through workshops in 2022 with MDPI and YKAN, and other commercial fisheries paper for SC WCPFC → Provided paper again?

No	Recomendation	Progress
8	No on-site visit was conducted in preparation for the 2022 catch estimates due to the COVID-19 pandemic. Furthermore, the transition period for scientists to move to BRIN impacts accessibility to any funds from the government or any projects. The meeting noted changes in estimates for certain gears and areas between 2020 and 2021 and recommended that PUSDATIN, DGCF, and BRIN investigate the sources of the catch estimates to help explain these changes, in particular (carry over). • Investigate the source of the increased POLE-AND-LINE catches in FMAs 713/714/715 (if possible, validate the catches from the key landing sites with other data sources). • Investigate the source of the increased GILLNET catches in FMAs 716/717 from the landing sites Jayapura, Kota Jayapura, Nabire and Sarmi. • Investigate the source of the OTHER GEARs catches in FMAs 716/717 for the large bigeye tuna catch from the RAWAI DASAR and other gears	Setditjen PT has prepared data for districts that provide largest catch production in preparation for the 2023 catch estimates. → To be discussed during ITFACE14

No	Recomendation	Progress
9	In ITFACE-12, DGCF and BRIN endeavour to disseminate the SDI definitions of fish names are recommended to be implemented through an appropriate website tool to all stakeholders in the fishery. In 2022, the master data still needs to be reviewed to ensure compatibility with the official document; it is expected to have a revised version in 2023. Regarding the master data, starting from 2021, PUSDATIN is the data custodian (for the whole data relating to the MMAF (i.e. fish name, fishing port name, fisheries management area).	PUSDATIN already have a master data for fish name and also established a Ministerial Decree on the fish species name and category.
10	ITFACE-13 acknowledges the need to deploy the observer for longline fisheries in the IFMAs to have better data coverage.	No observer deployed on longline vessel in 2022


THANK YOU

AP2HI
Asosiasi Perikanan Pole & Line dan Handline Indonesia
Indonesian Pole & Line and Handline Fisheries Association

Data Collection by AP2HI Year 2022

indonesian tuna
Sustainable by tradition One-by-one

YAYASAN IPNLF INDONESIA

Sentul, May 30th 2023

INTRODUCTION

Information

- Informasi fokus tipe alat tangkap, jenis kapal dan alat tangkap, metode, alur pengambilan data hingga verifikasi dan validasi, target dan subject pendataan **=> masih sama informasinya dengan yang disampaikan di ITFACE 13**
- Pertengahan 2023 => proses integrasi dengan System IFISH MDPI untuk HL
- ITFACE 13: PS => ITFACE 14: PS & Observer Data

WCPFC Location

- Sulawesi Selatan (Sinjai; PPI Lappa)
- Sulawesi Tenggara (Kendari; PPS Kendari, PP Sodohoa – Buton; Ps Wajo, Kondowa, Sampuabalo)
- Sulawesi Utara (Bitung; PPS Bitung, Companies Private Port)
- Maluku Tengah (Tulehu; Tanjung Air Panas)
- Maluku Utara (Ternate; PP Bastiong, PP Dufadufa – Bacan; PP Panamboang)
- Papua Barat (Kota Sorong; PP Sorong, Manoi – Kab Sorong; Private Port Aimas)
- NTT (Maumere; PP Alok, PP Wuring - Larantuka: PP Amagarapati

Presentation Data Outline

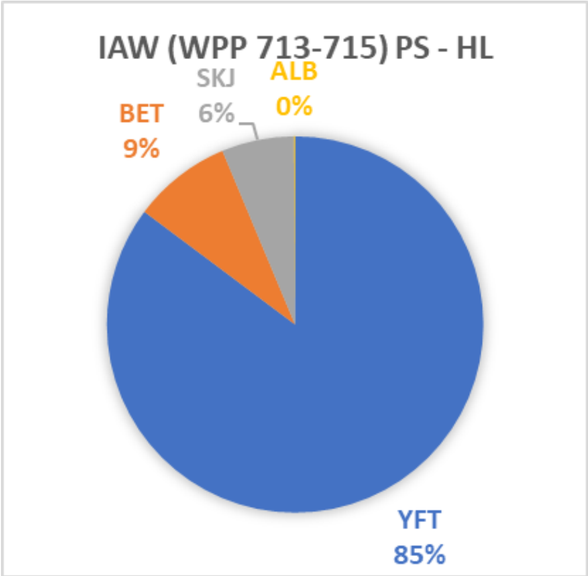
GEAR	LOCATION	METHOD	DATA SHOW
HL	IAW (713, 4, 5)	PS	√
HL	EEZ (716, 717)	PS	√
TL (Licence)	IAW (713, 4, 5)	PS	√
PL	IAW (713, 4, 5)	PS	√
PL	EEZ (716, 717)	PS	X
PL	IAW (713, 4, 5)	OBS	√
PL	EEZ (716, 717)	OBS	√

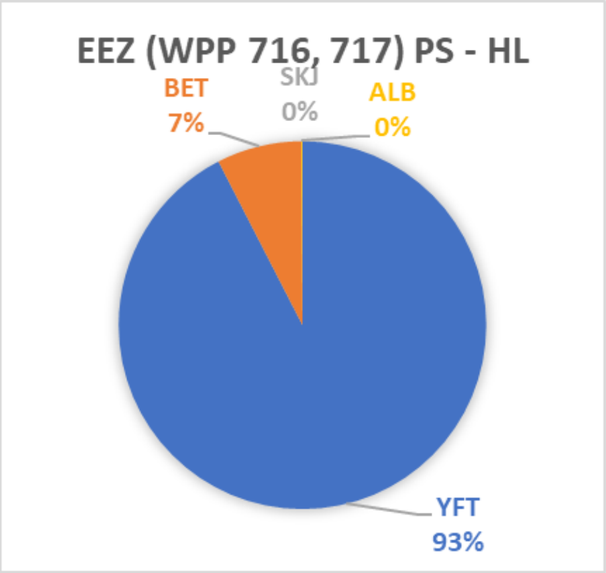
CATCH COMPOSITION

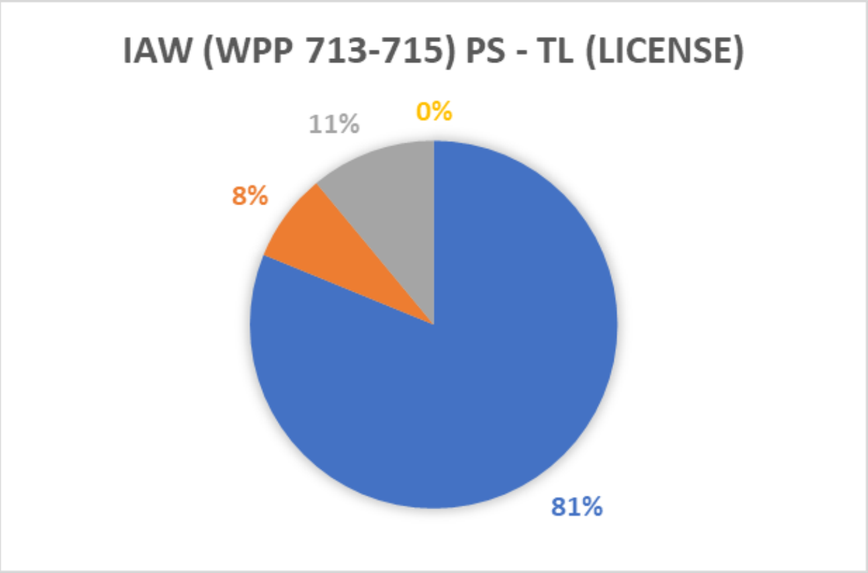
SOURCE DATA: **PORT SAMPLING**

YEAR : **2022**

PROVIDER DATA	GEAR	LOCATION/GEAR	YFT	BET	SKJ	ALB
AP2HI	HANDLINE	IAW (WPP 713-715) PS - HL	156528	15557	11381	204
AP2HI	HANDLINE	EEZ (WPP 716, 717) PS - HL	18491	1490	0	20
AP2HI	TROLL LINE (Lice	IAW (WPP 713-715) PS - TL (Licens	30995	2970	4208	0



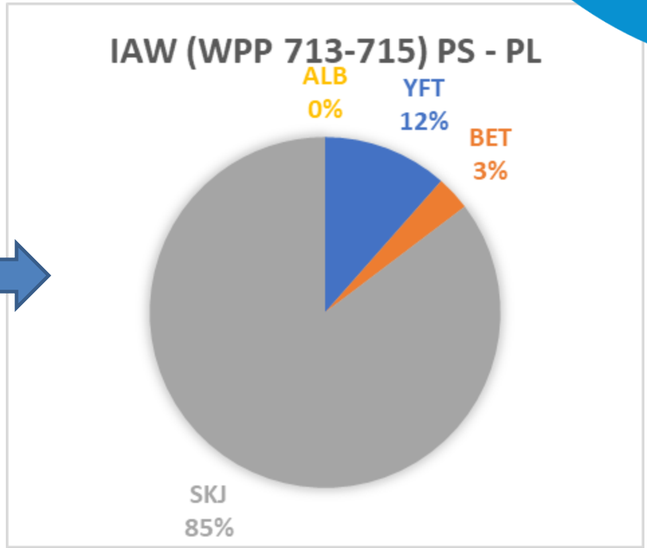




CATCH COMPOSITION

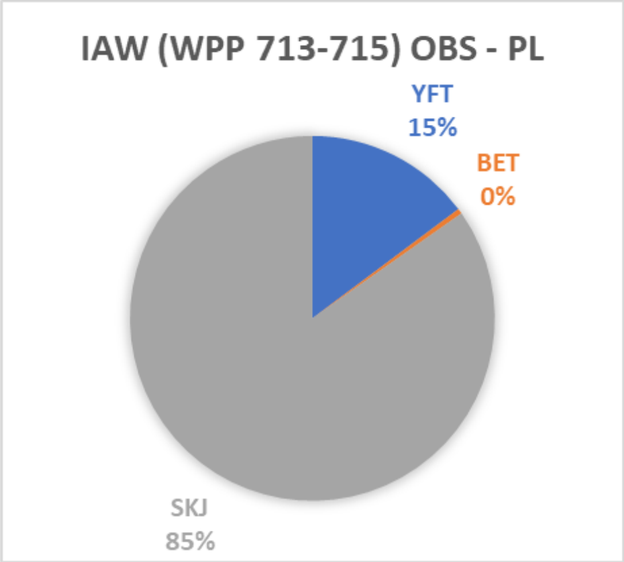
SOURCE DATA: **PORT SAMPLING**
YEAR : **2022**

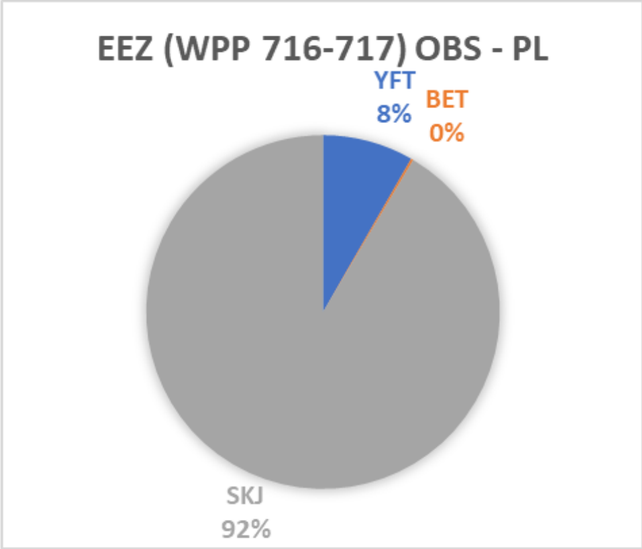
PROVIDER DATA	GEAR	LOCATION	YFT	BET	SKJ	ALB
AP2HI	POLE & LINE	IAW (WPP 713-715) PS - PL	6684	1839	49536	0
AP2HI	POLE & LINE	EEZ (WPP 716-717) PS - PL	N/A	N/A	N/A	N/A



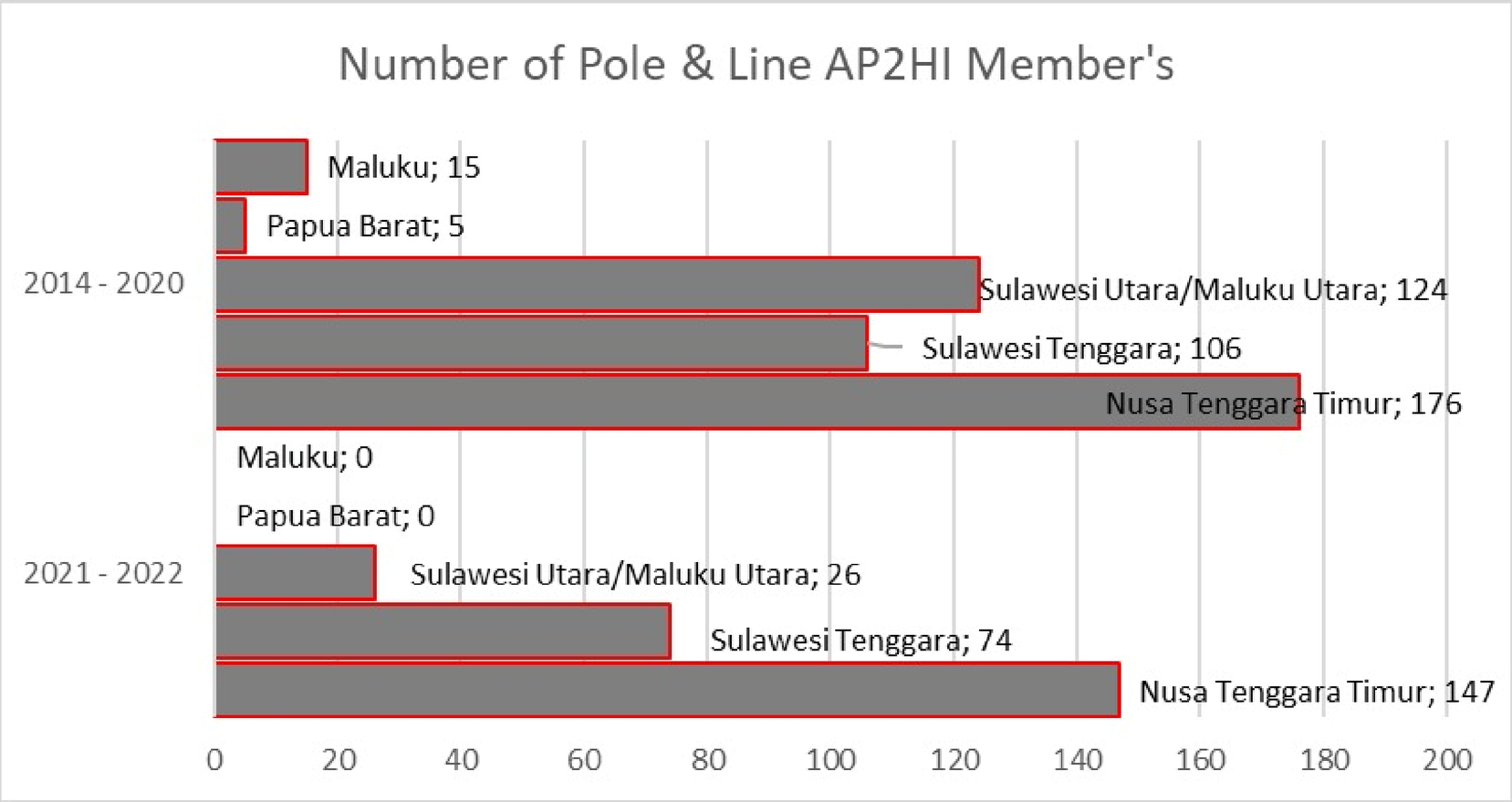
SOURCE DATA: **OBSERVER**
YEAR : **2022**

PROVIDER DATA	GEAR	LOCATION	YFT	BET	SKJ
AP2HI	POLE & LINE	IAW (WPP 713-715) OBS - PL	9288	291	53288
AP2HI	POLE & LINE	EEZ (WPP 716-717) OBS - PL	472	12	5198





KAPAL PL AKTIF



Per 2023, Kapal PL CRAC sudah terdaftar di Anggota AP2HI

DATA COLLEC. DOCUMENTATION

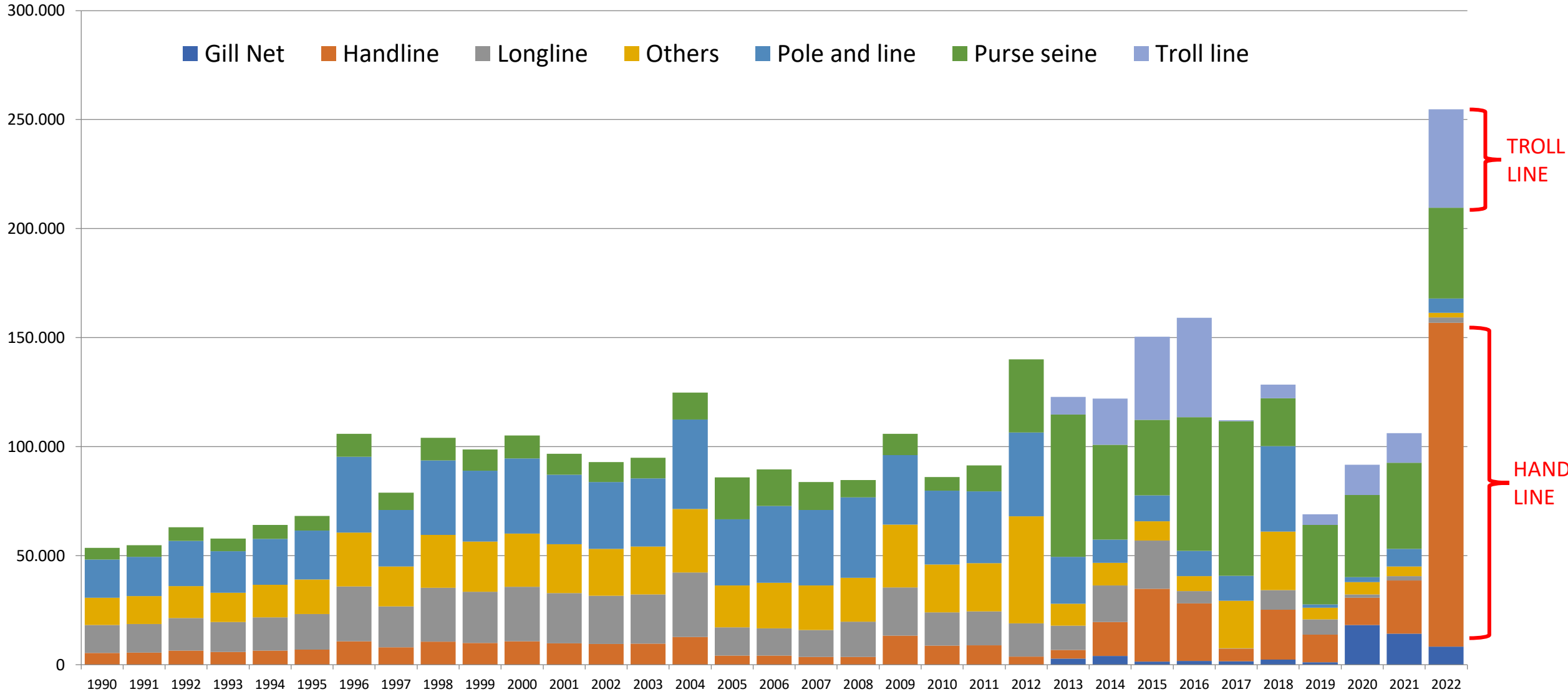
DATA WCPFC 2022,

PRELIMINARY

SENTUL, 30 Mei 2023

TOTAL PER GEAR

FMA 716 - 717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Gill Net
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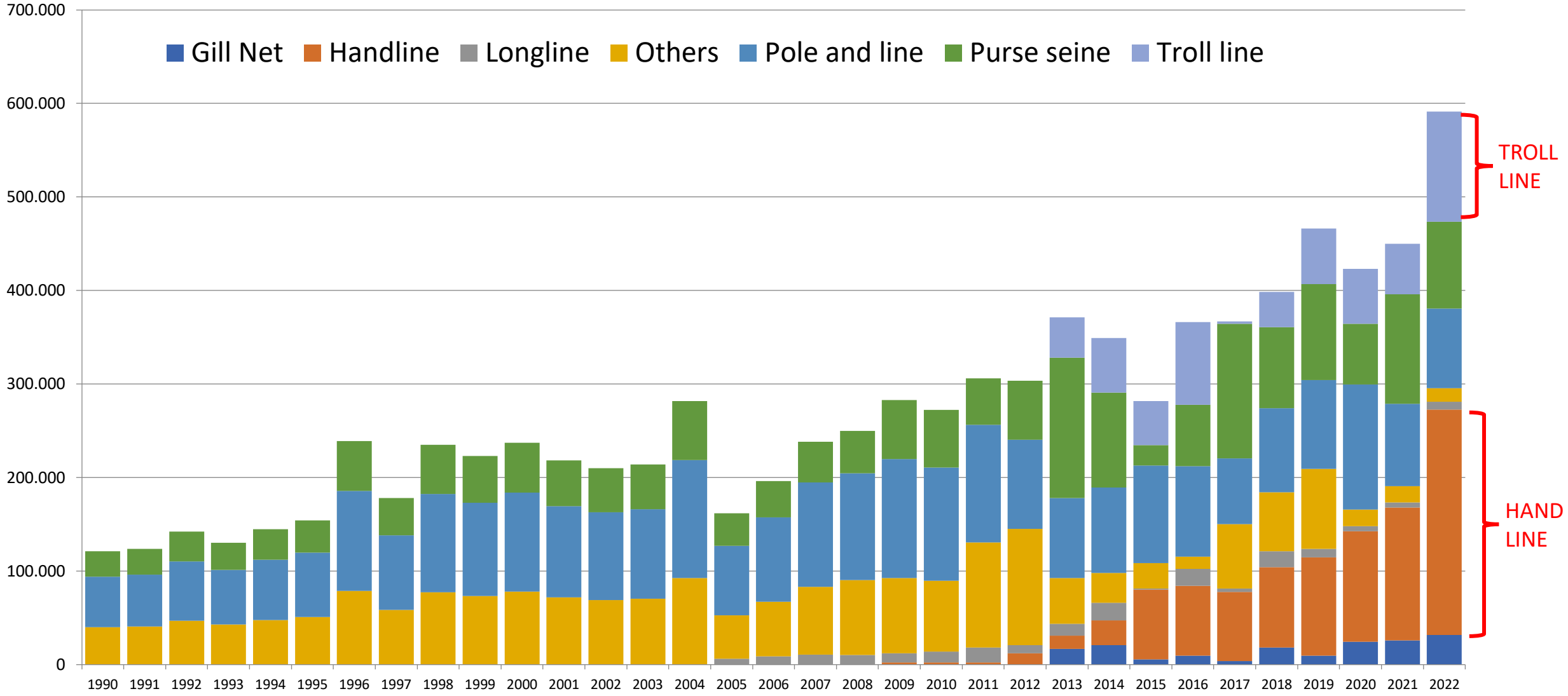
FMA 713 - 715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Gill Net
Handline
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Others
Pole and line
Purse seine
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TROLL LINE
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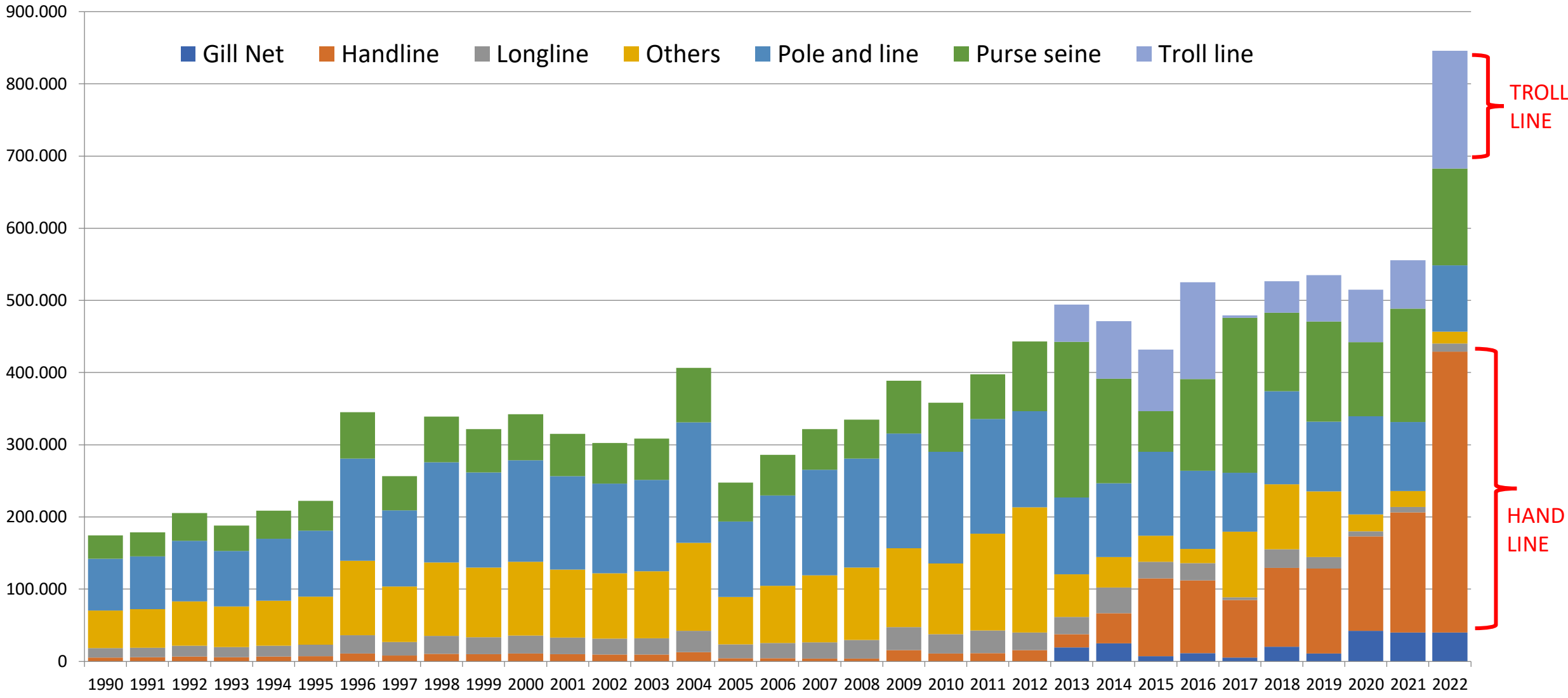
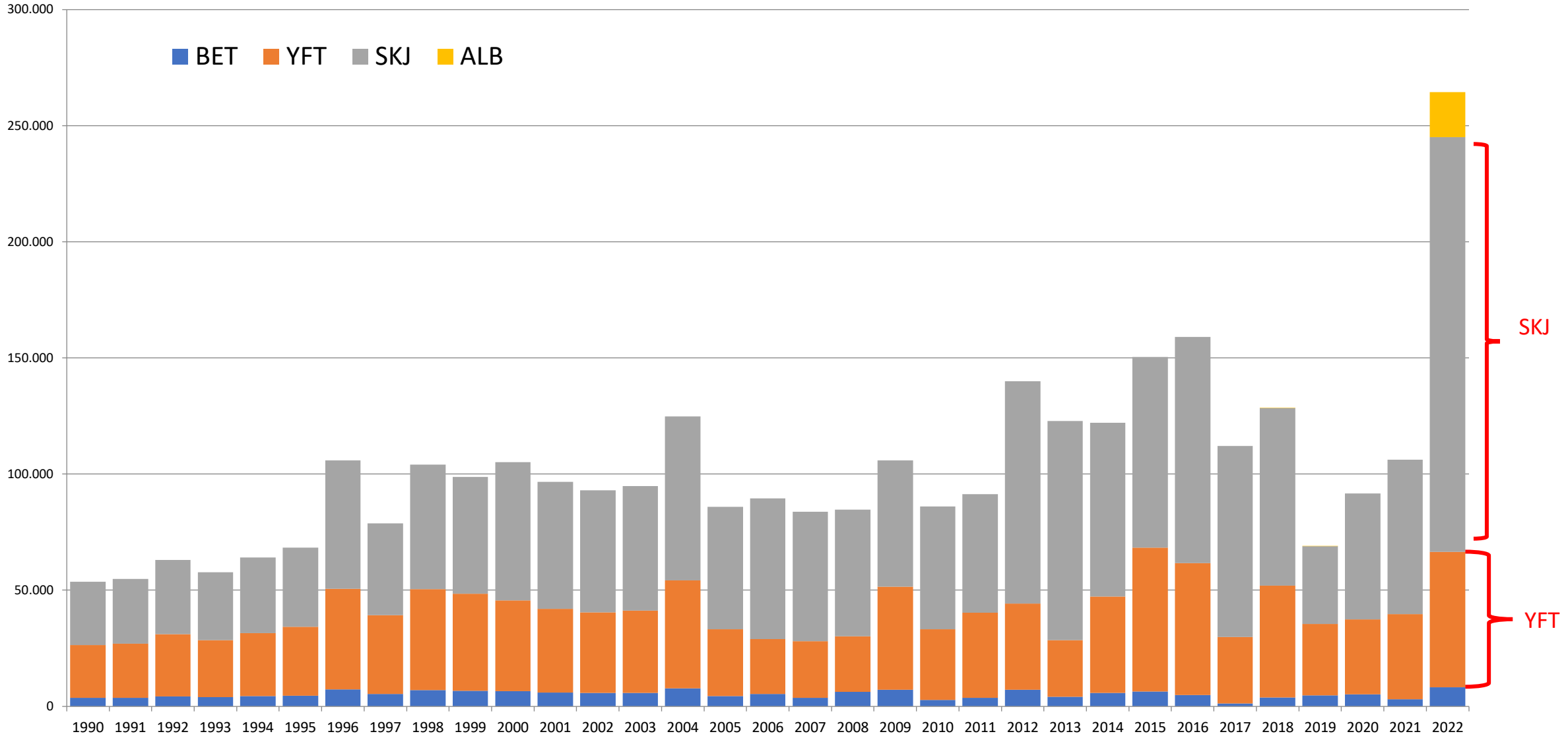
STATISTICAL AREA WCPFC



TOTAL PER SPECIES

FMA 716 - 717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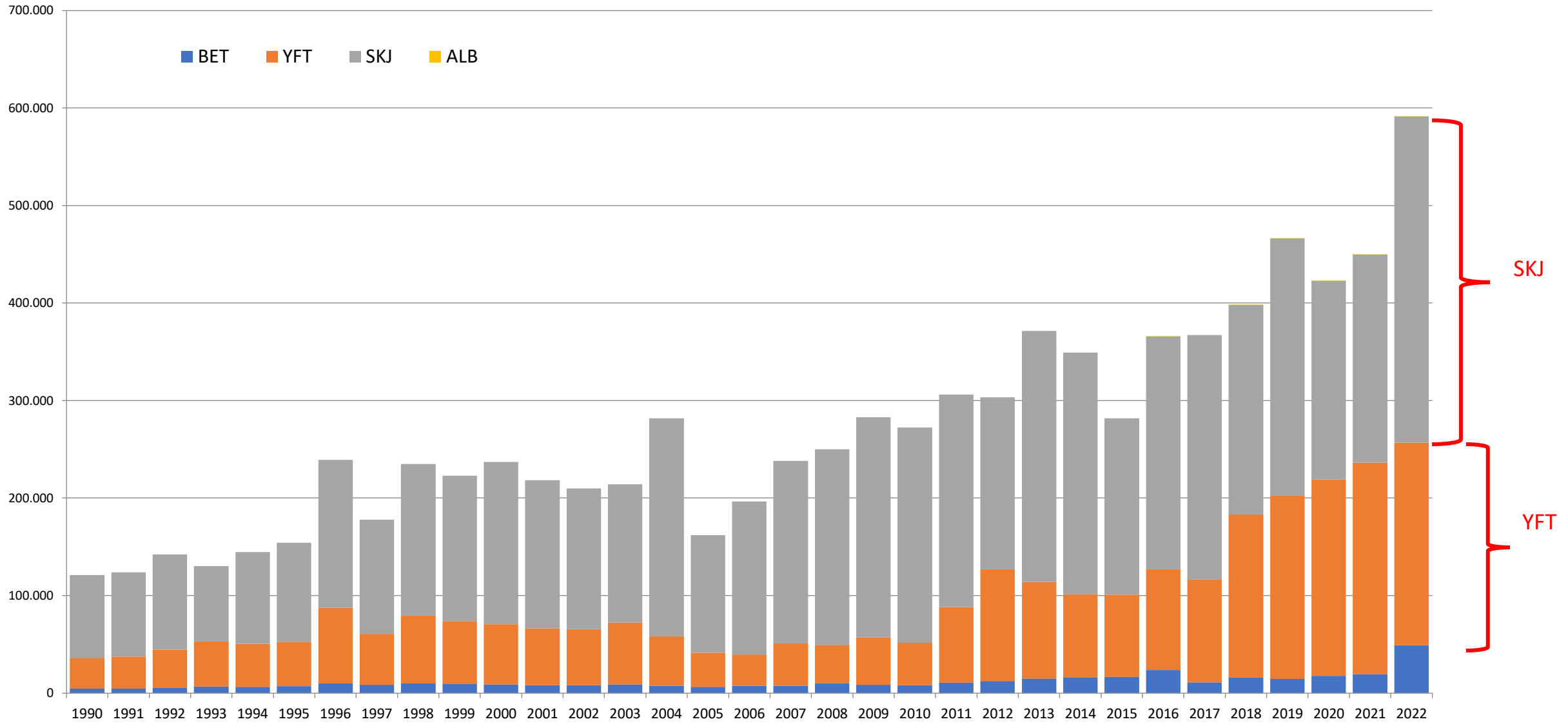
SKJ
YFT

FMA 713 - 715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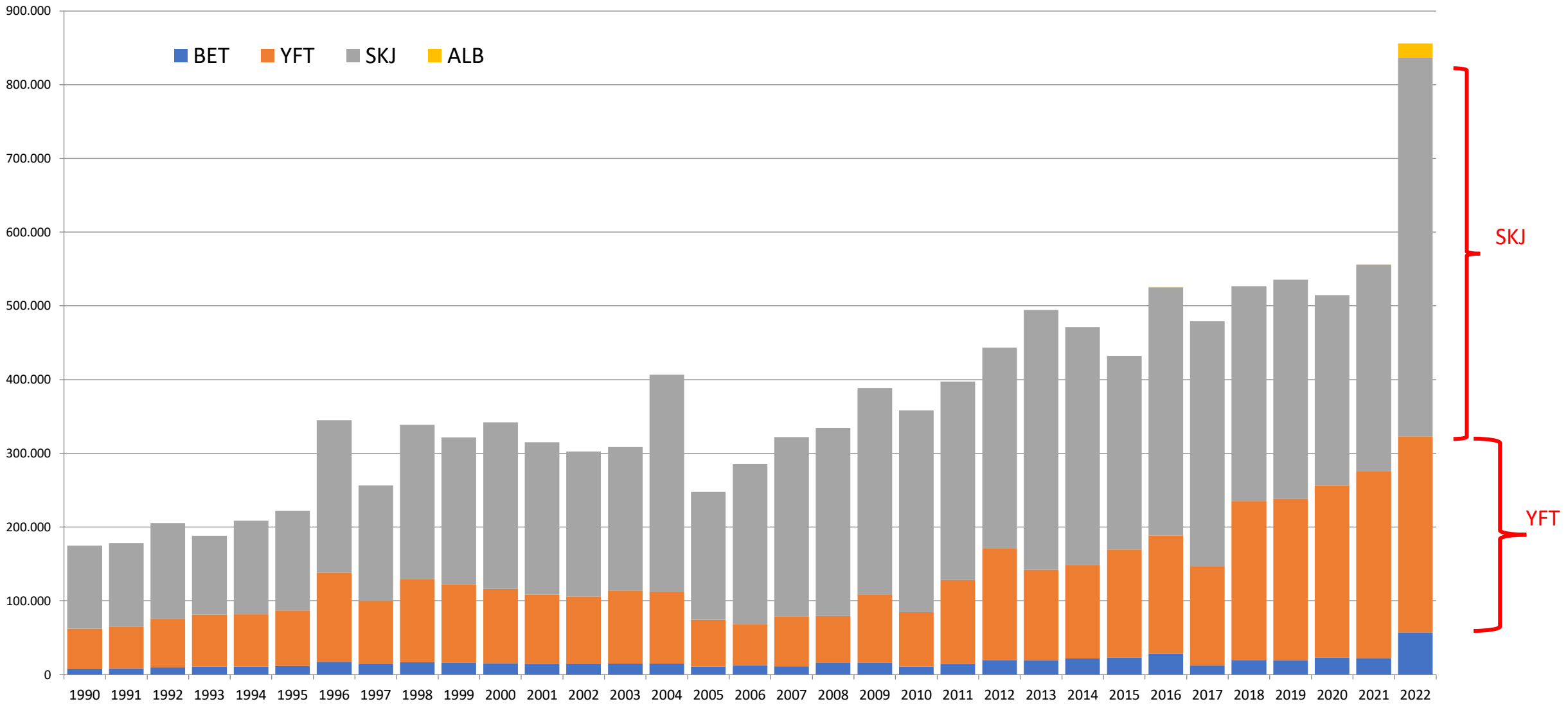
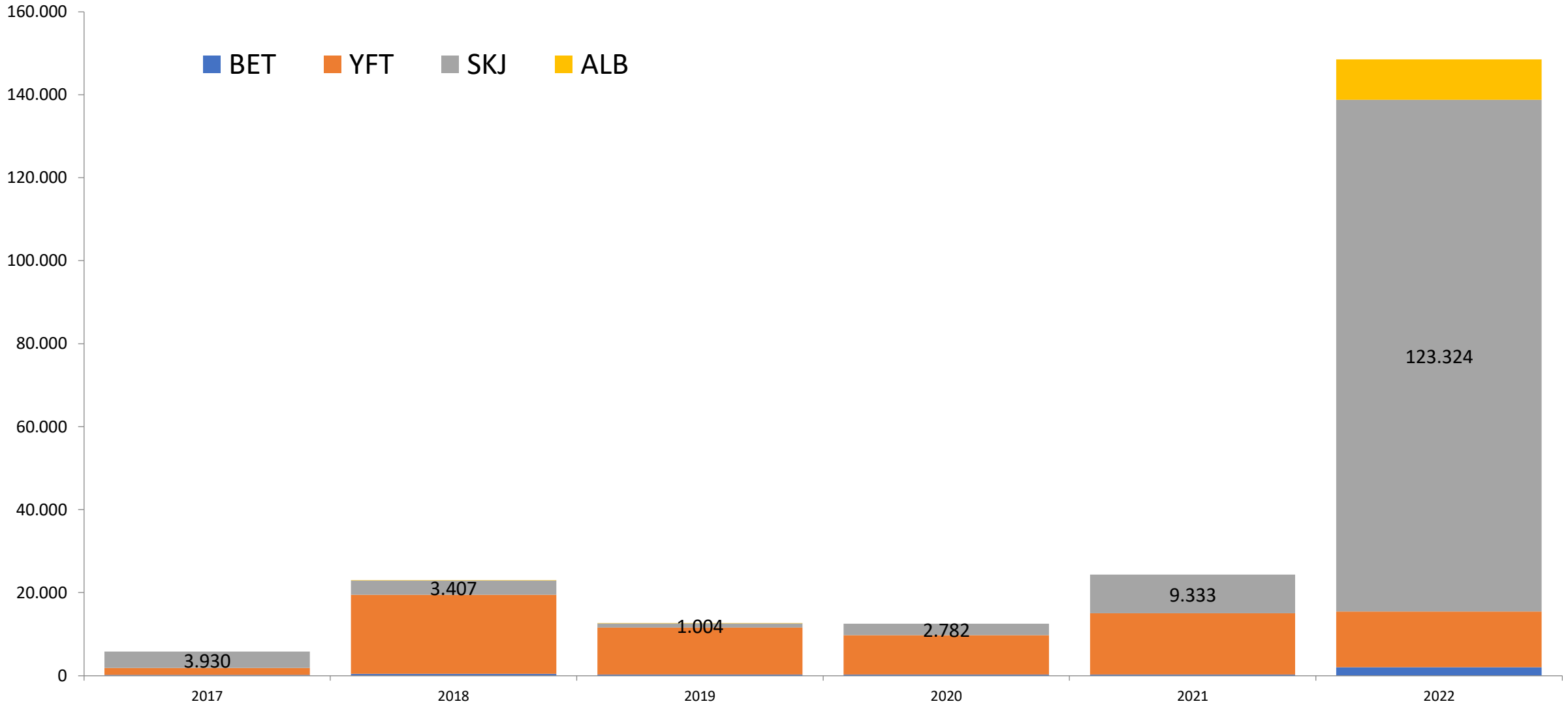
SKJ
YFT

STATISTICAL AREA WCPFC

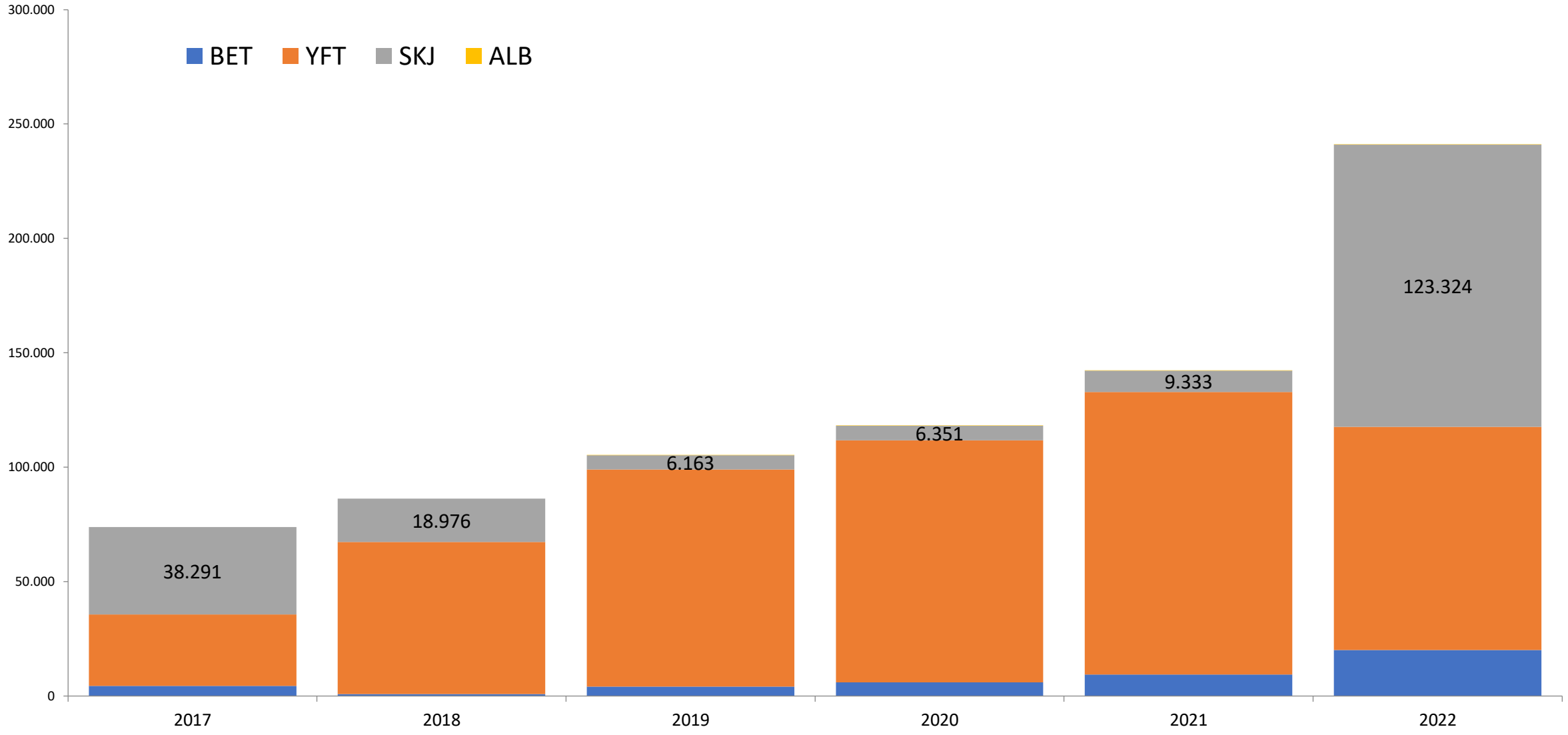


HAND LINE

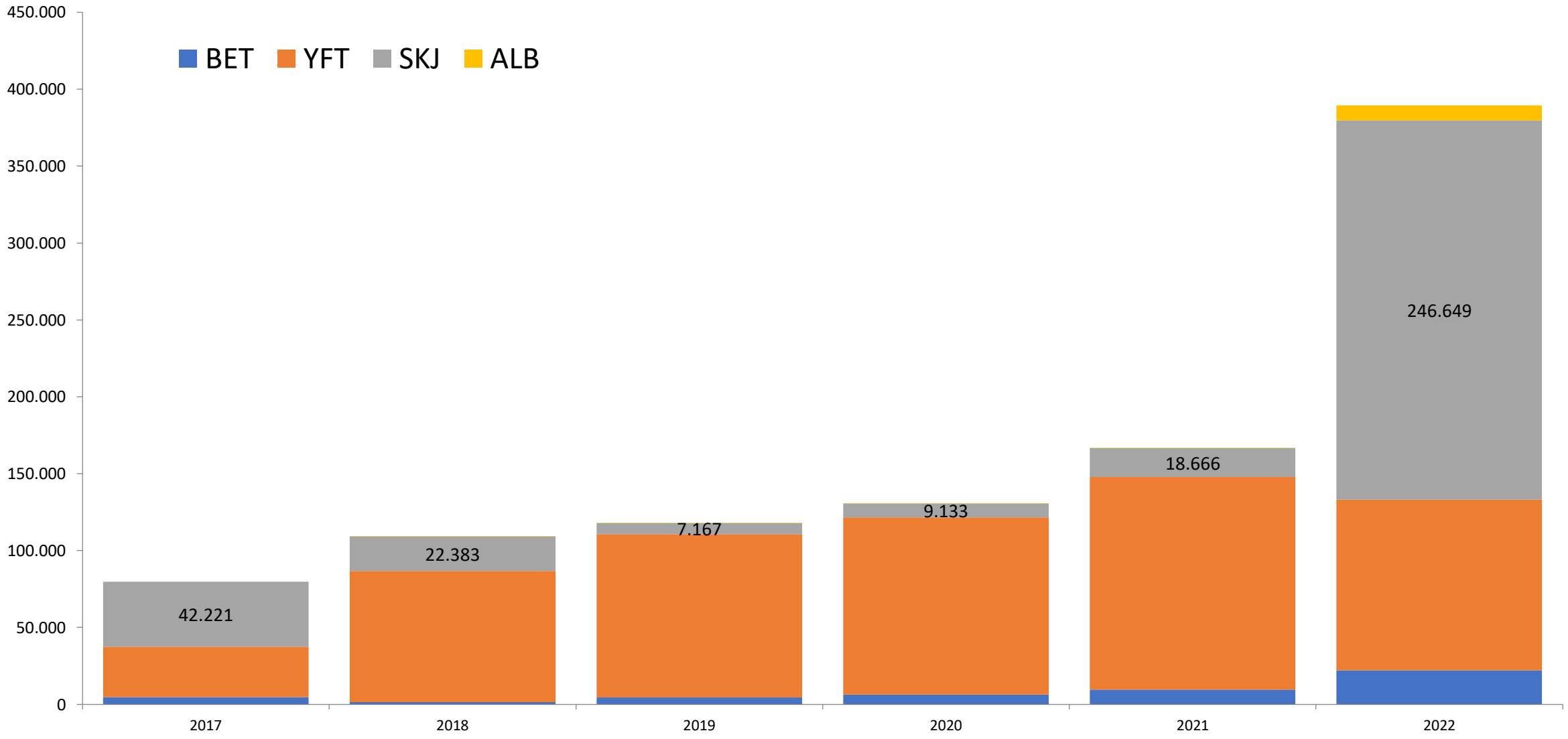
HANDLINE 716-717



HANDLINE 716-717



HANDLINE 716-717



HANDLINE

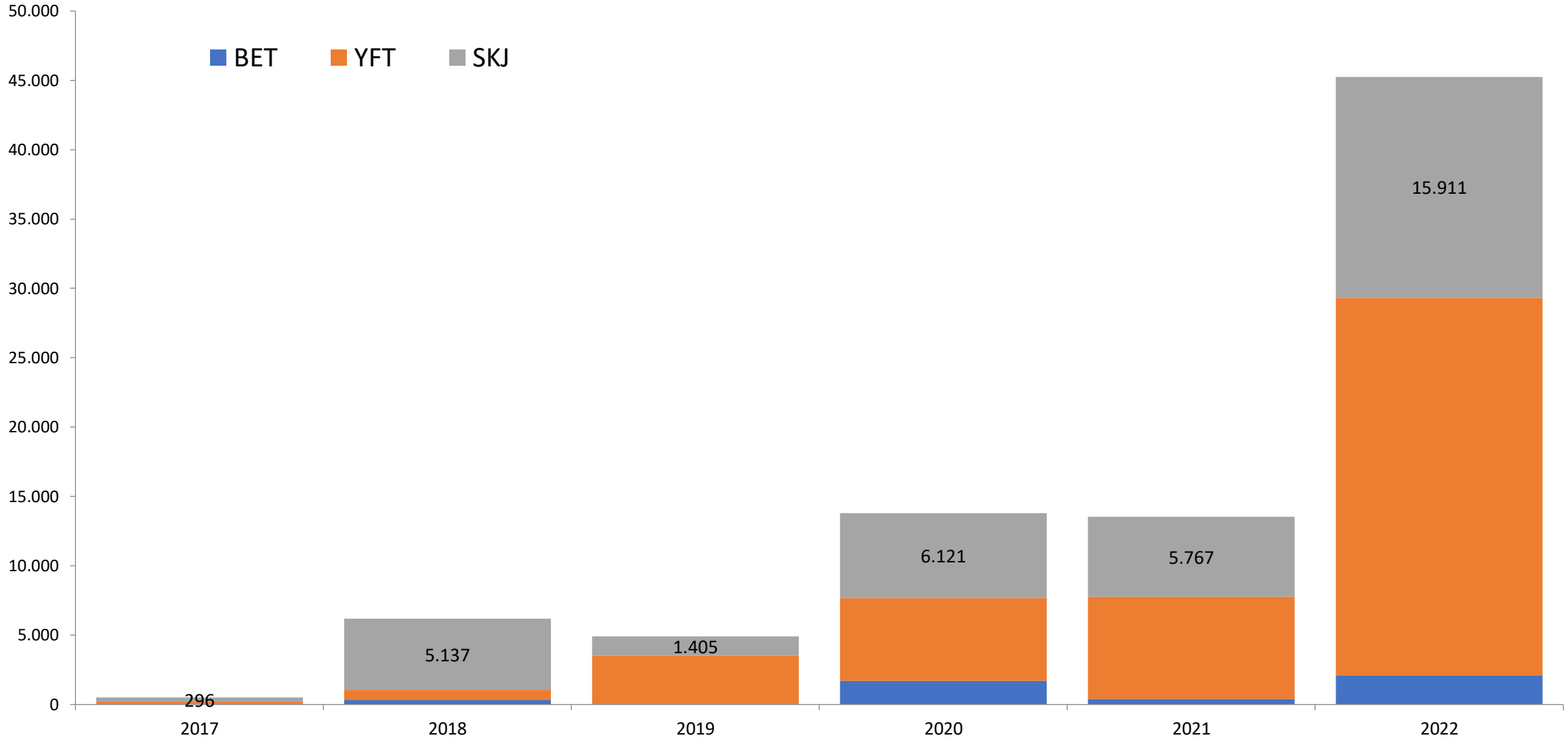
FMA	DISTRICT/FP	ALB		BET		SKJ		YFT	
		2021	2022	2021	2022	2021	2022	2021	2022
716 - 717	BIAK NUMFOR	-	9,737	7,347	-	171	8,408	9,980	6,208
716 - 717	BUOL	-	-	-	-	-	1,332	-	363
716 - 717	KEP SANGIHE	-	-	38	2	844	991	2,259	1,088
716 - 717	MINAHASA SELATAN	-	-	244	172	1,014	1,346	497	714
716 - 717	TOLI-TOLI	-	-	802	890	1,597	1,535		-
713 – 715	BANGGAI	-	-	462	462	1,119	1,119	-	-
713 – 715	BOALEMO	-	-	900	934	2,699	2,802	2,249	2,335
713 – 715	BOLMONG SELATAN	-	-	-	1,580	825	7	1,283	3,636
713 – 715	BONE	-	-	-	-	1,533	1,325	2,663	3,196
713 – 715	BURU SELATAN	-	-	-	1,066	-	889	1,809	1,054
713 – 715	BUTON SELATAN		-	137	1,471	-	-		1,608
713 – 715	DONGGALA	-	-	1	256	2,553	65,406	-	-
713 – 715	GORONTALO	-	-	-	-	-	1,594	4,788	9,963

HANDLINE

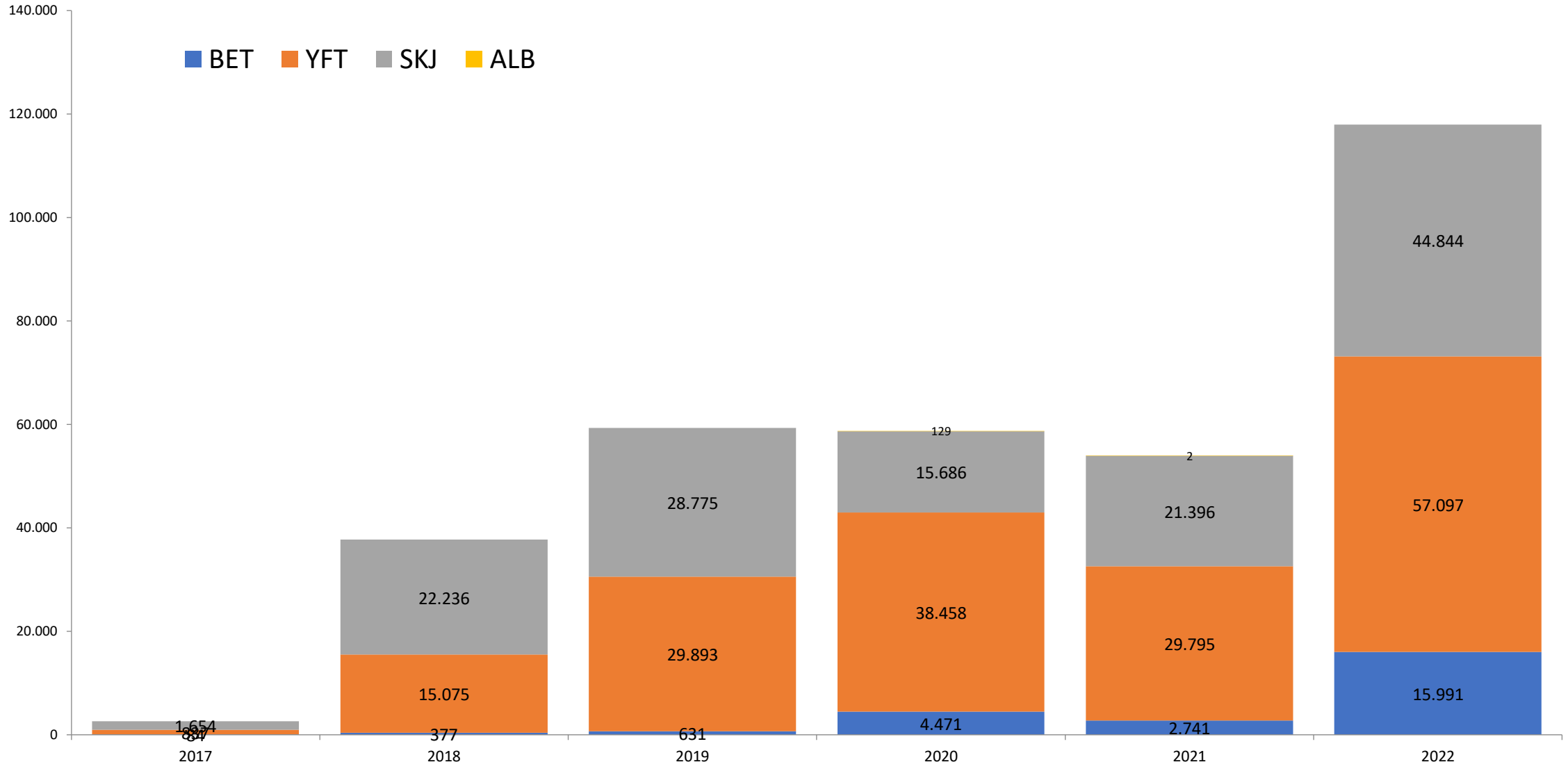
FMA	DISTRICT/FP	ALB		BET		SKJ		YFT	
		2021	2022	2021	2022	2021	2022	2021	2022
713 – 715	HALMAHERA BARAT	-	-	-	-	-	2,491	656	653
713 – 715	HALMAHERA TENGAH	-	-	-	-	2,629	2,491	983	653
713 – 715	HALMAHERA TIMUR	-	-	-	-	-	2,795	-	1,045
713 – 715	KEPULAUAN SULA	-	-	-	-	997	1,376	-	-
713 – 715	KOTA BITUNG	-	-	-	-	458	458	1,717	1,717
713 – 715	KOTA GORONTALO	-	-	-	7,054	381	638	6,625	4,497
713 – 715	KOTA SORONG	-	-	-	-	-	8,648	1,903	10,877
713 – 715	KOTA TIDORE KEPULAUAN	-	-	-	-	3,457	3,634	4,633	4,871
713 – 715	LUWU	-	-	136	1,092	797	711	1,834	771
713 – 715	MAMUJU	-	-	-	-	1,380	1,174	2,618	2,301
713 – 715	MOROWALI	-	-	-	3,021	1,315	1,642	483	139
713 – 715	PARIGI MOUTONG	-	-	-	-	1,263	1,263		-
713 – 715	POLEWALI MANDAR	-	-	-	65	3,788	6,078	2,884	818
713 – 715	PULAU MOROTAI	-	-	-	-	-	-	23,295	24,507
713 – 715	SORONG	-	-	-	-	21	518	1,324	1,144
713 – 715	SUMBAWA	-	-	-	-	5,793	5,250	2,508	2,690

TROLL LINE

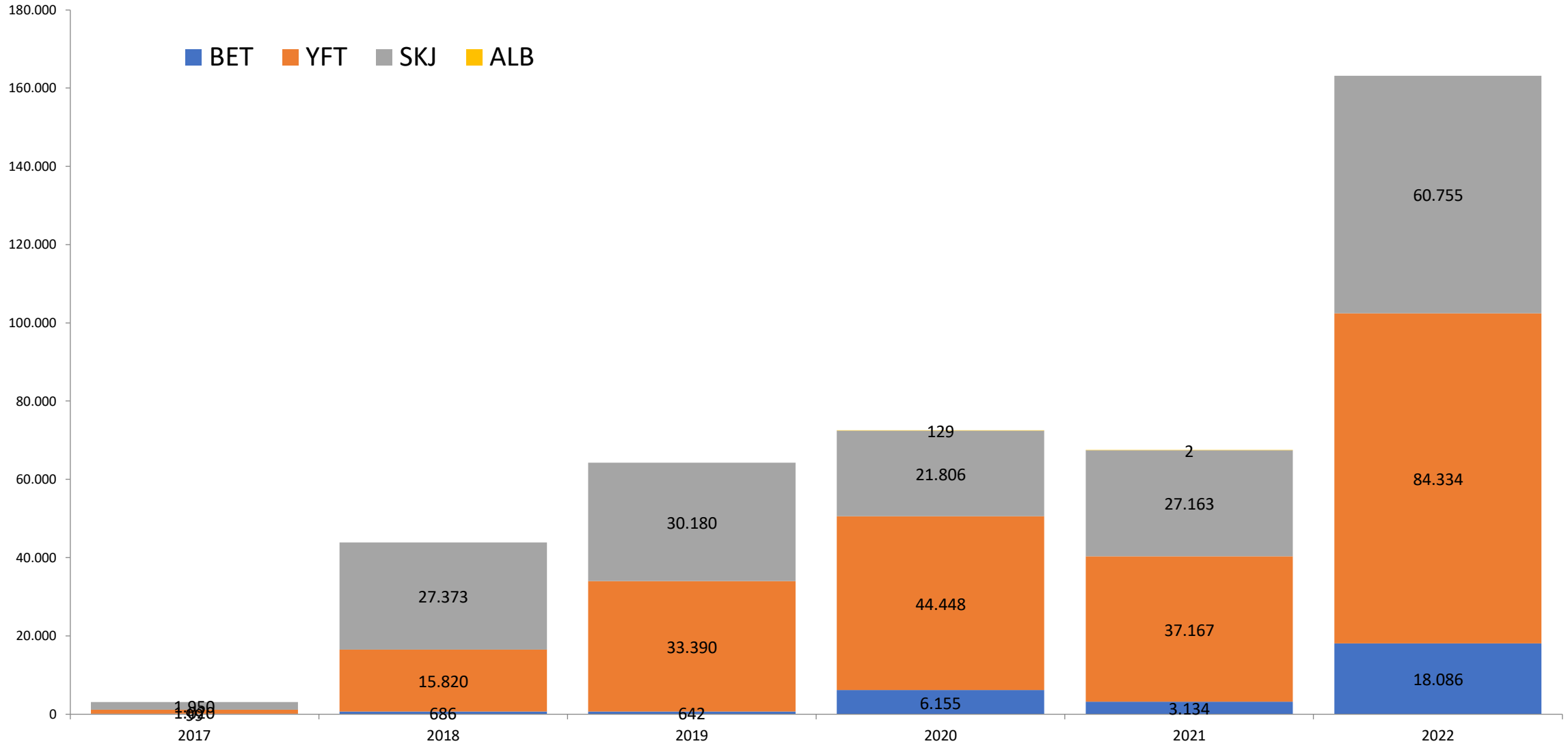
TROLL LINE 716-717



TROLL LINE 713-715



TROLL LINE STATISTICAL AREA

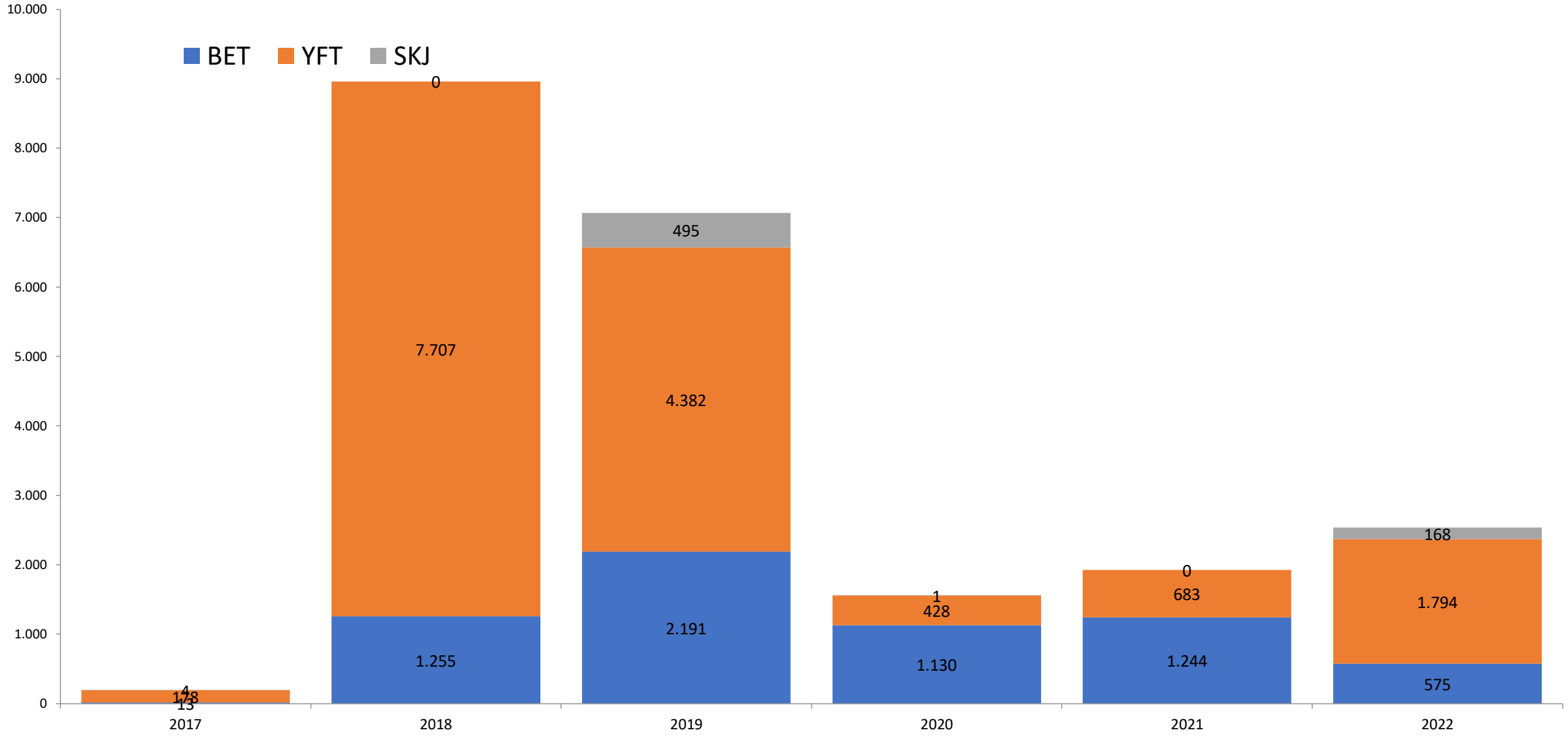


TROLL LINE

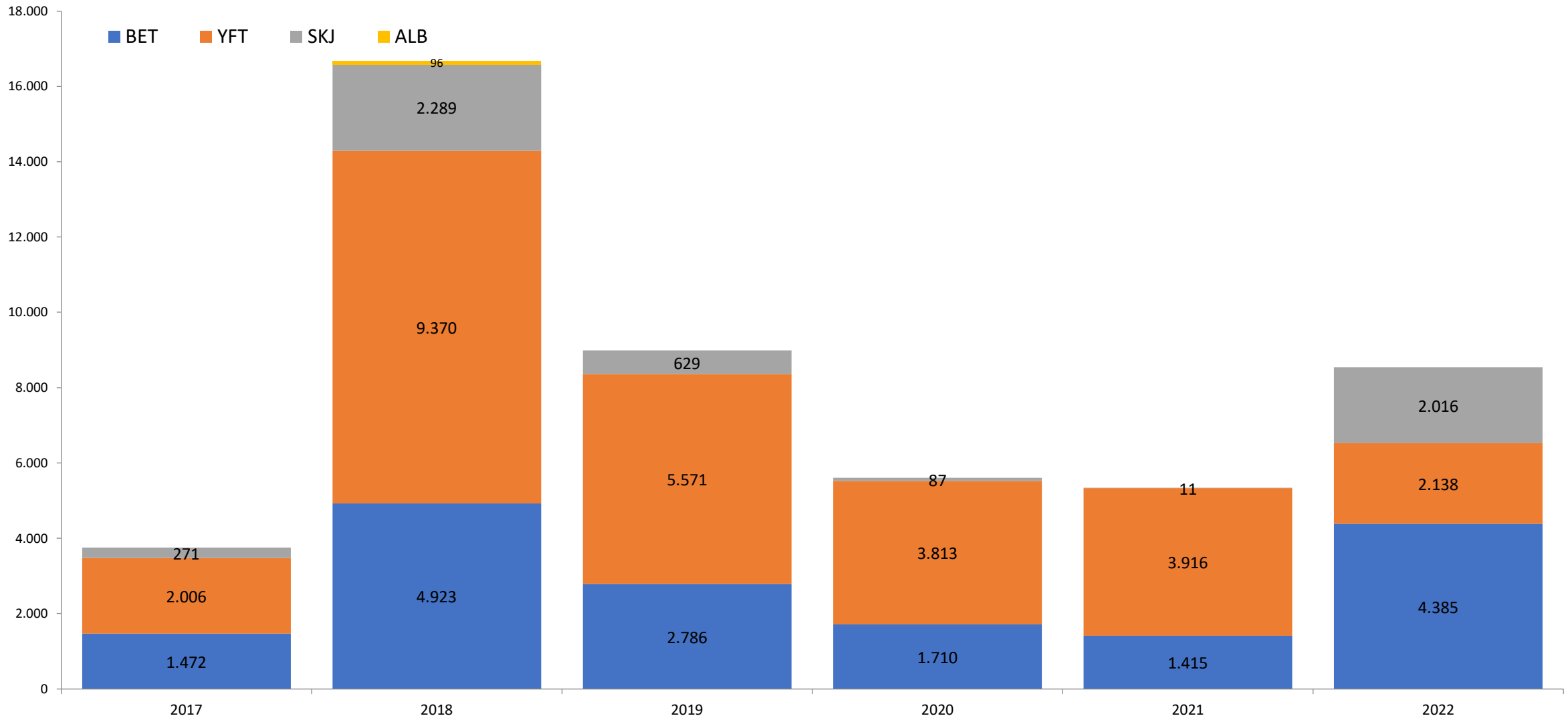
FMA	DISTRICT/FP	BET		SKJ		YFT	
		2021	2022	2021	2022	2021	2022
716 - 717	BIAK NUMFOR	-	292	-	1,080	-	895
716 - 717	KOTA JAYAPURA	375	277	3,845	13,493	5,238	24,320
716 - 717	MANOKWARI	897	1,169	-	-	934	1,097
713 - 715	BULELENG	-	470	1,723	1,683	1,340	1,415
713 - 715	BURU SELATAN	-	1,098	2,266	1,054	1,989	1,098
713 - 715	BUTON	503	916	1,461	1,583	1,379	1,333
713 - 715	KOTA AMBON	2,590	2,952	317	3,323	3,029	3,471
713 - 715	KOTA TERNATE	-	2,855	-	6,148	9,091	9,594
713 - 715	MALUKU TENGAH	-	-	4,584	4,698	15,888	15,610
713 - 715	SERAM BAGIAN BARAT	-	-		8,605	3,725	13,652
713 - 715	SINJAI	1,193	3,171	4,431	4,951	-	1,762
713 - 715	WAKATOBI	-	-	444	1,270	167	1,065

LONG LINE

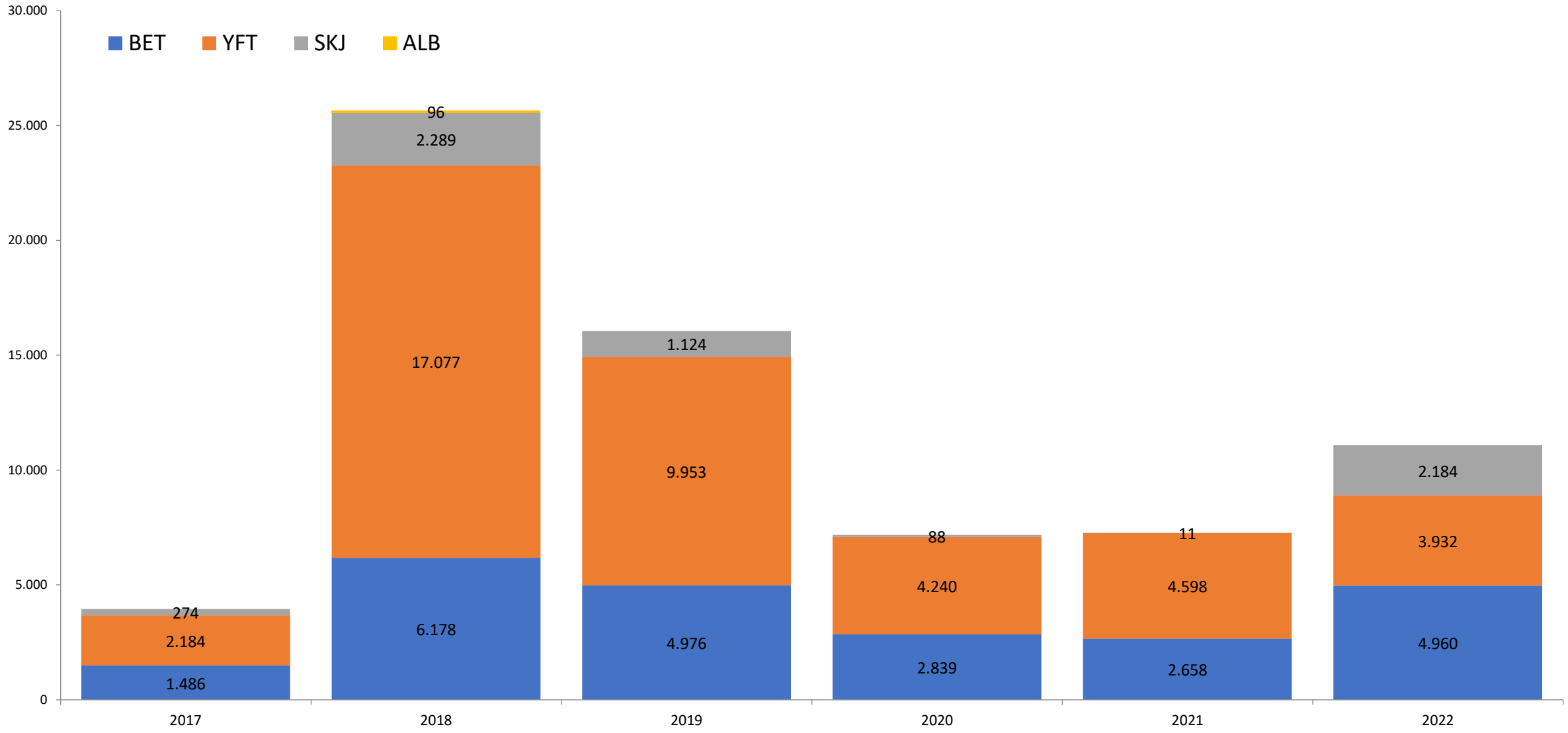
LONG LINE 716-717



LONG LINE 713-715

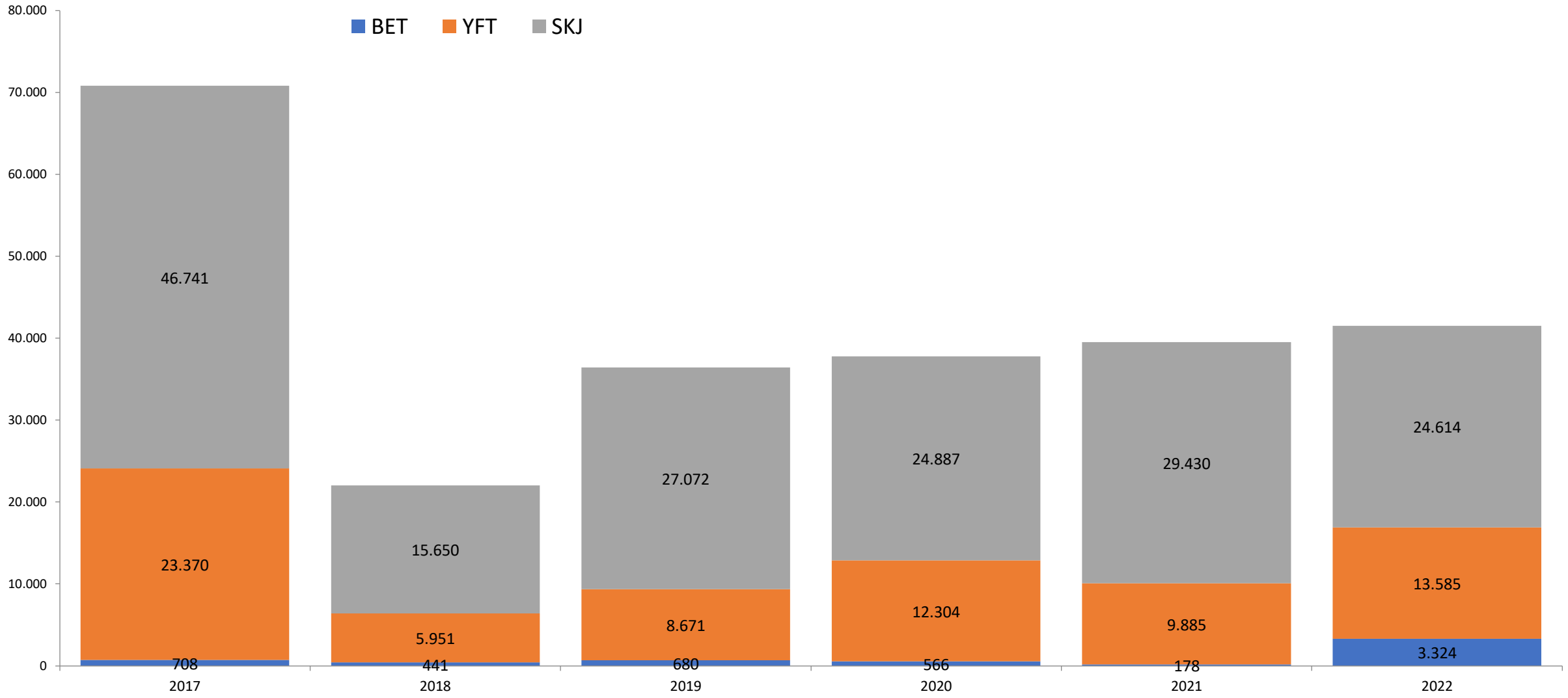


LONG LINE STATISTICAL AREA

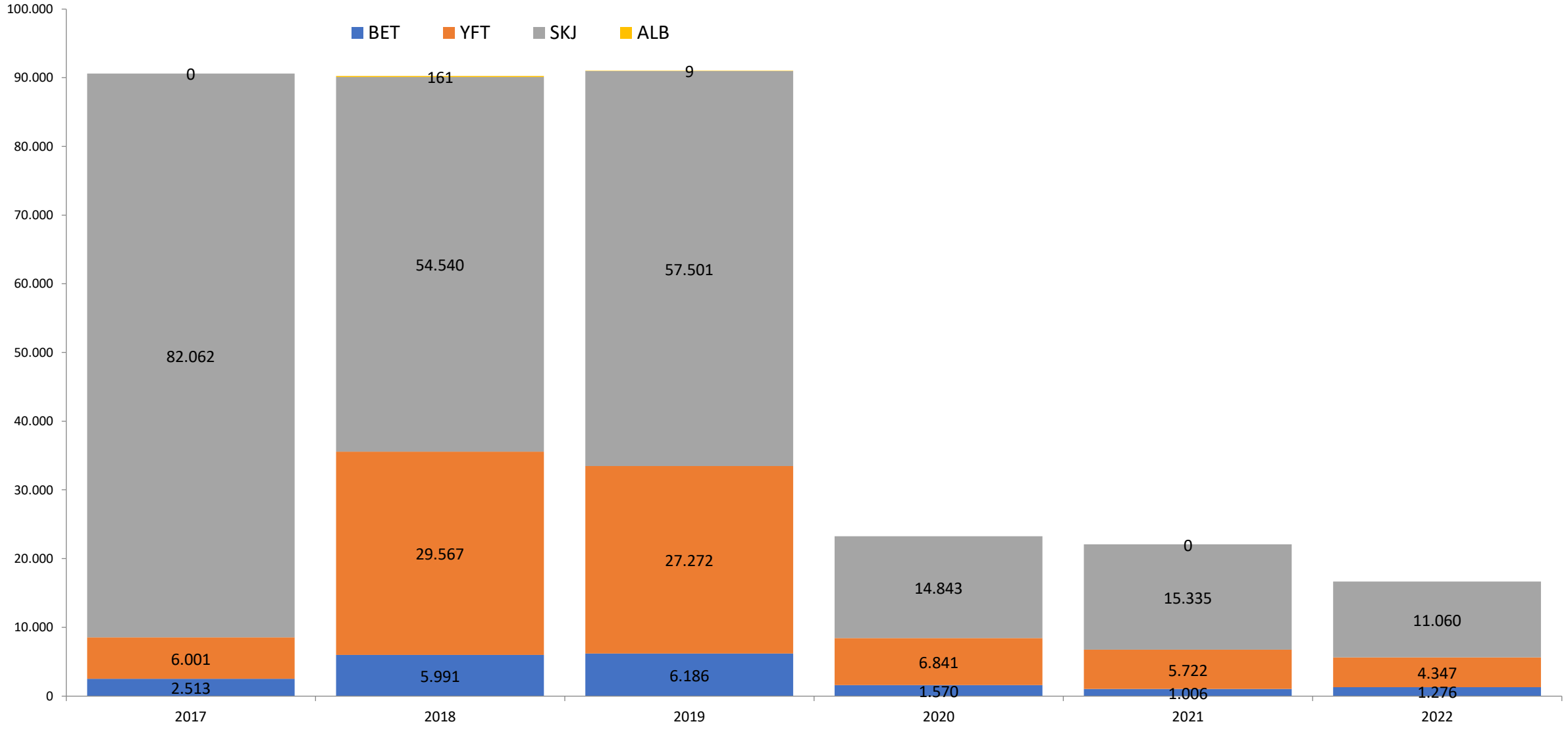


PURSE SEINE

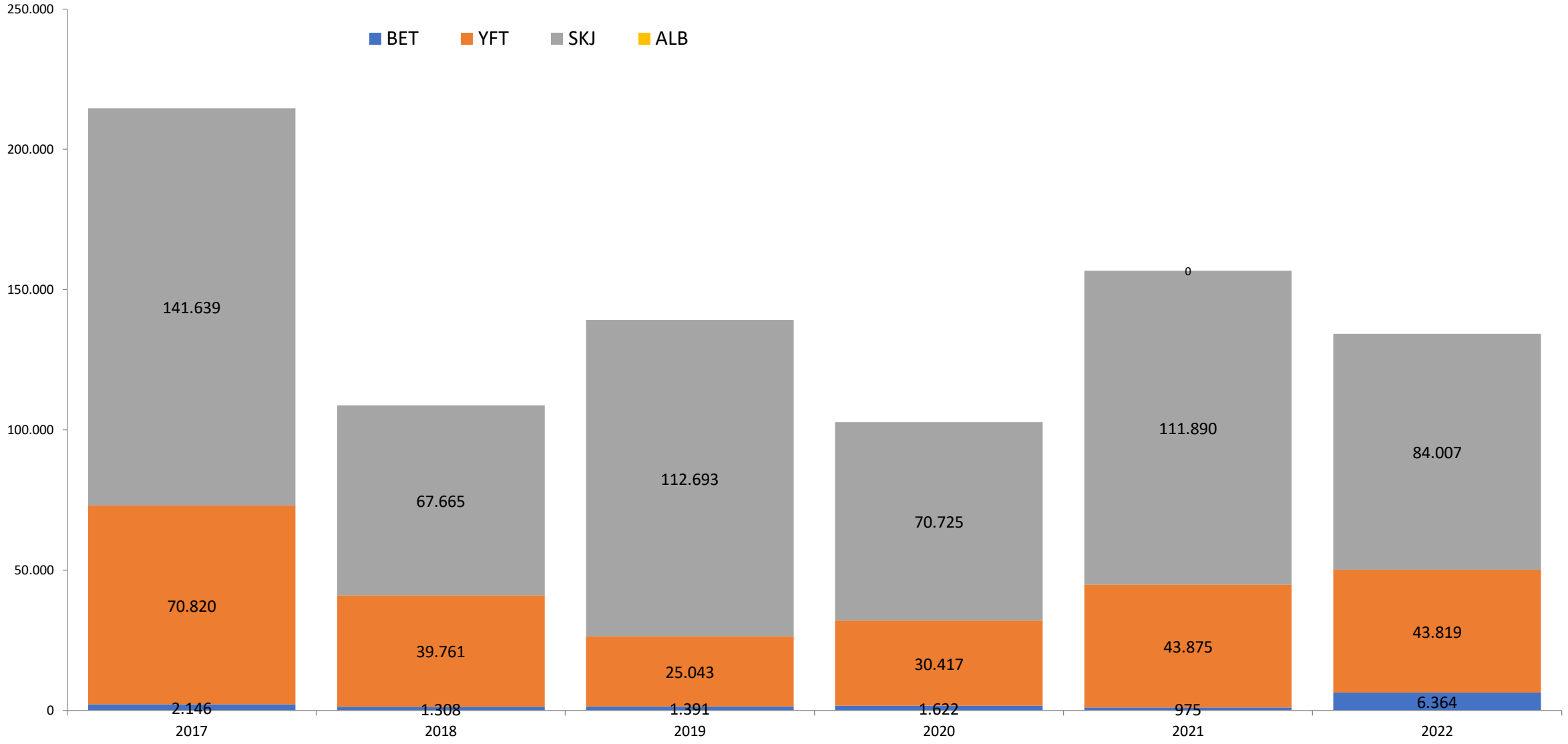
PURSE SEINE 716-717



PURSE SEINE 713-715

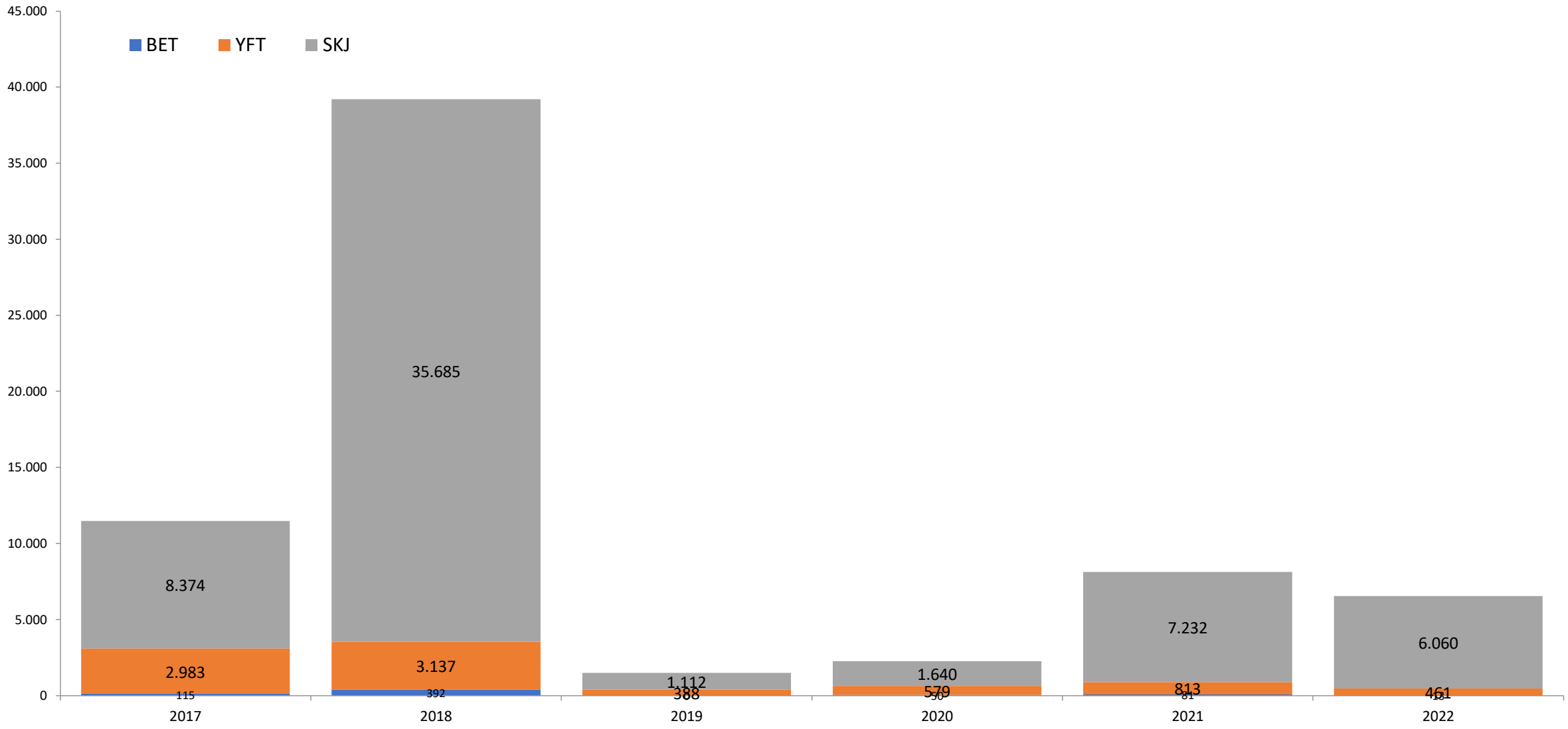


PURSE SEINE STATISTICAL AREA

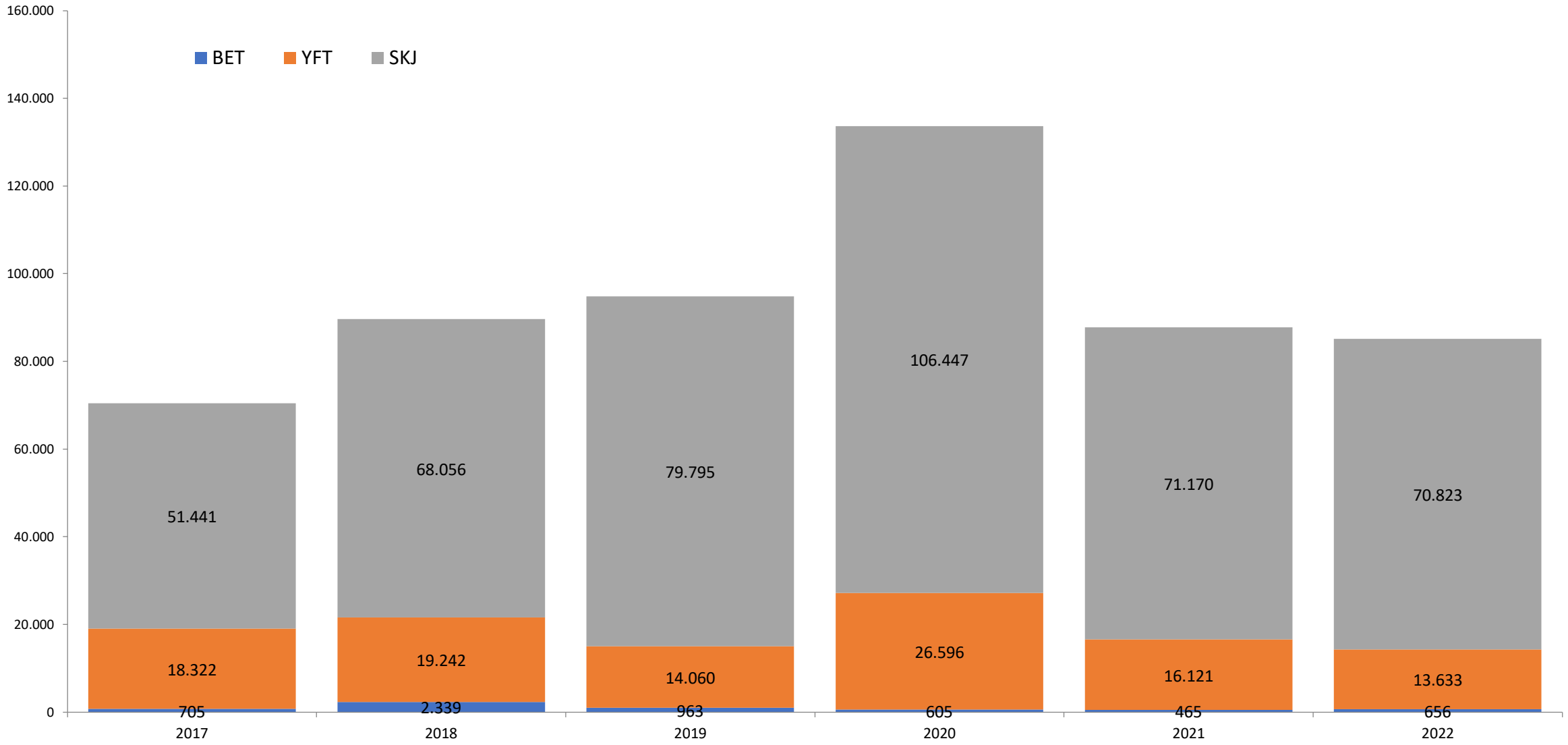


POLE AND LINE

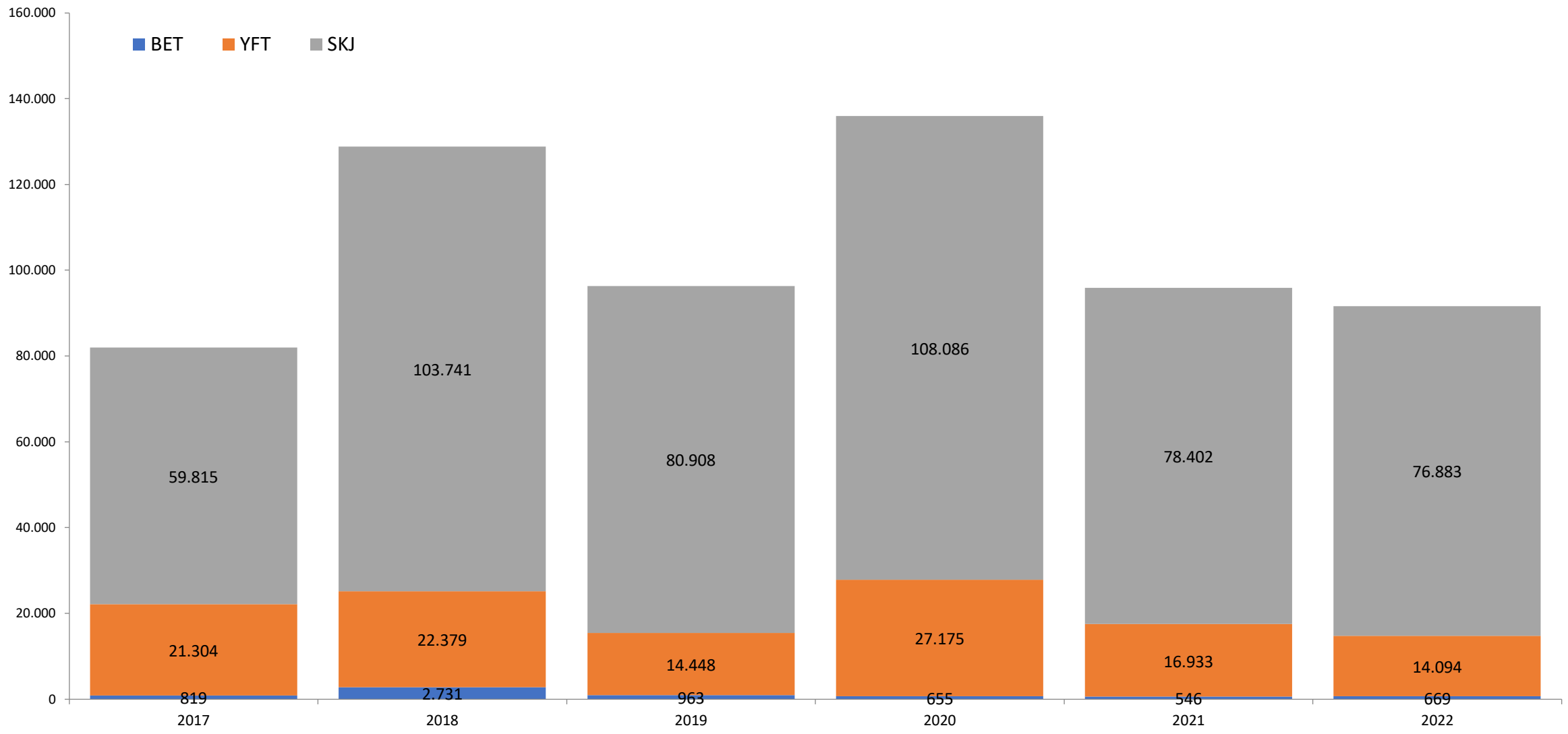
POLE AND LINE 716-717



POLE AND LINE 713-715

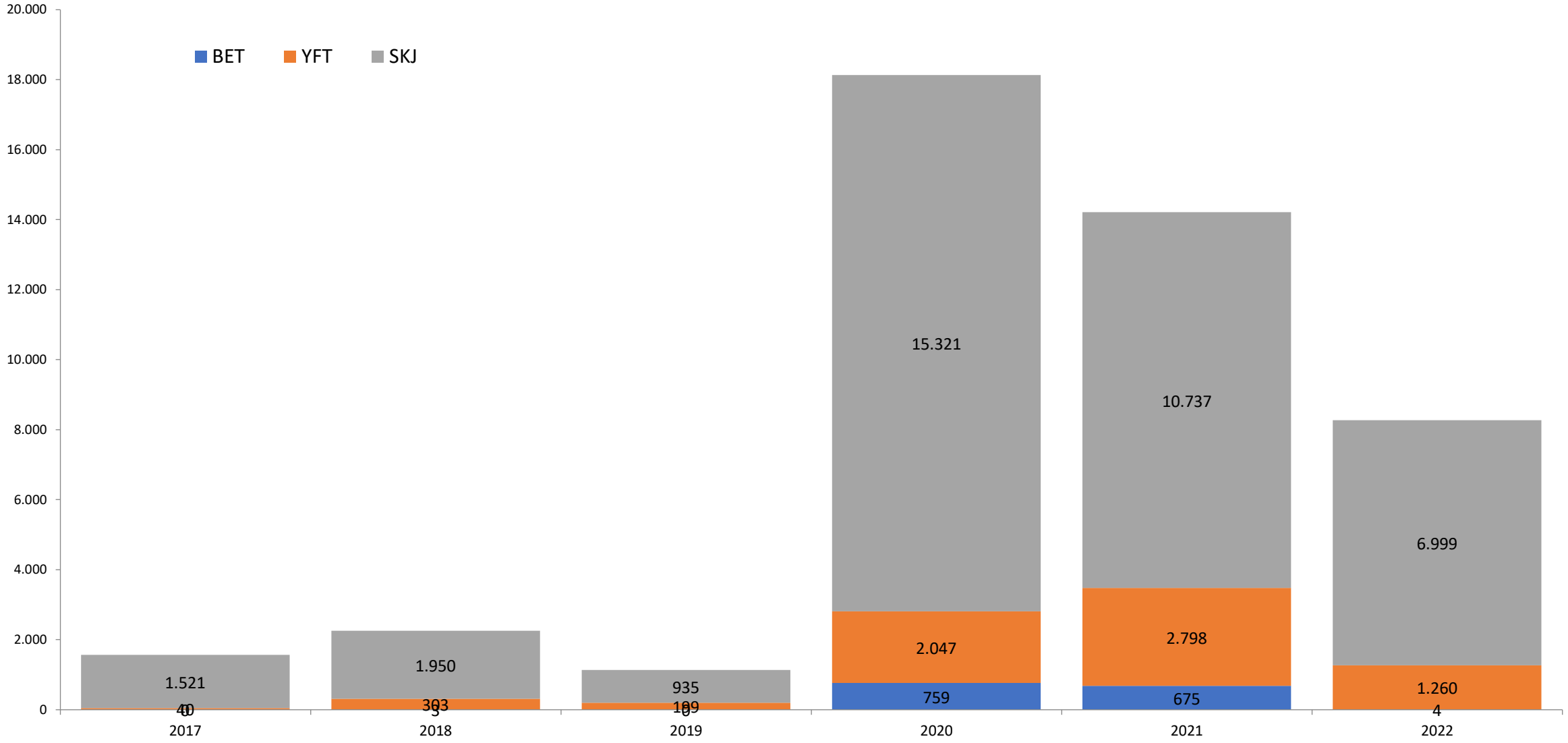


POLE AND LINE STATISTICAL AREA

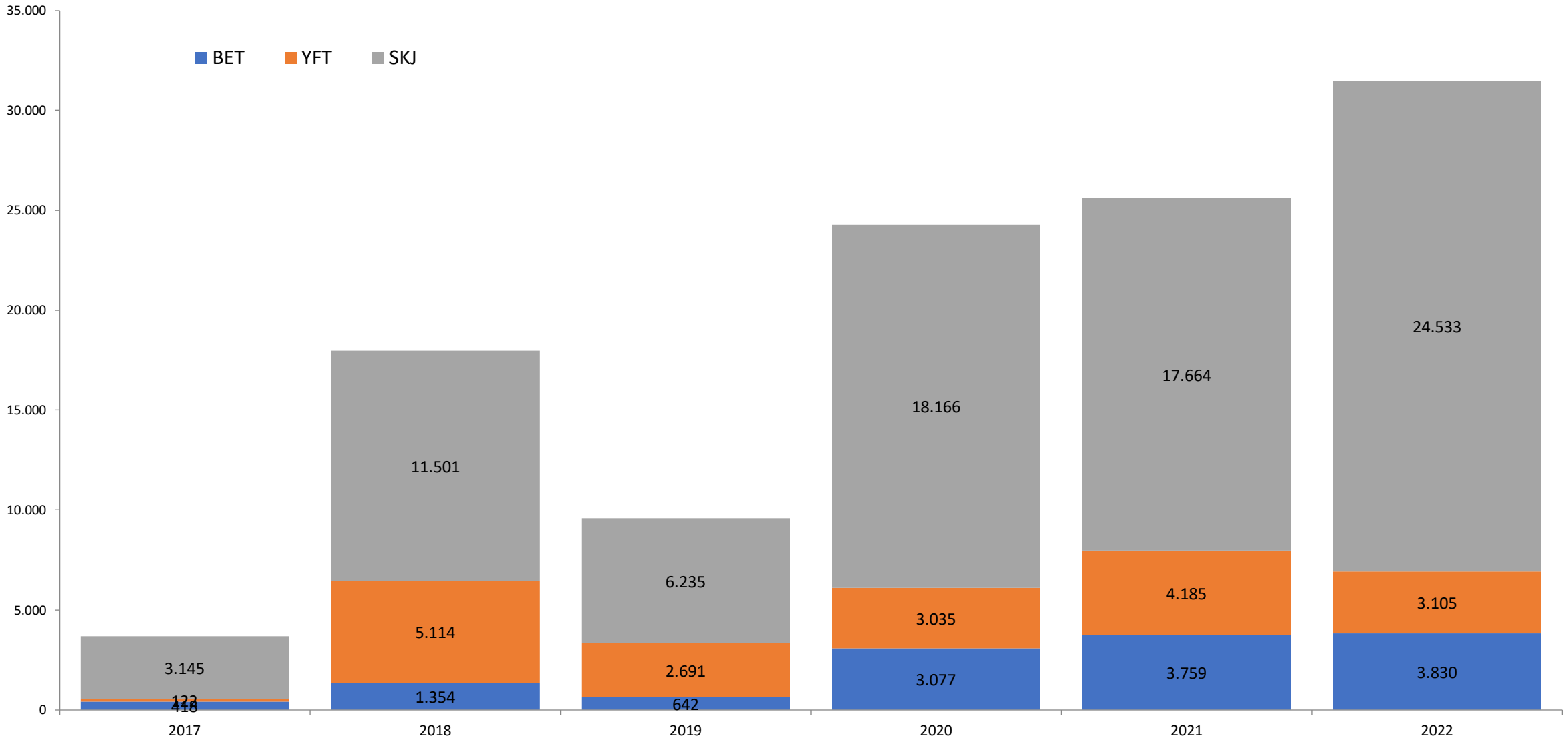


GILL NET

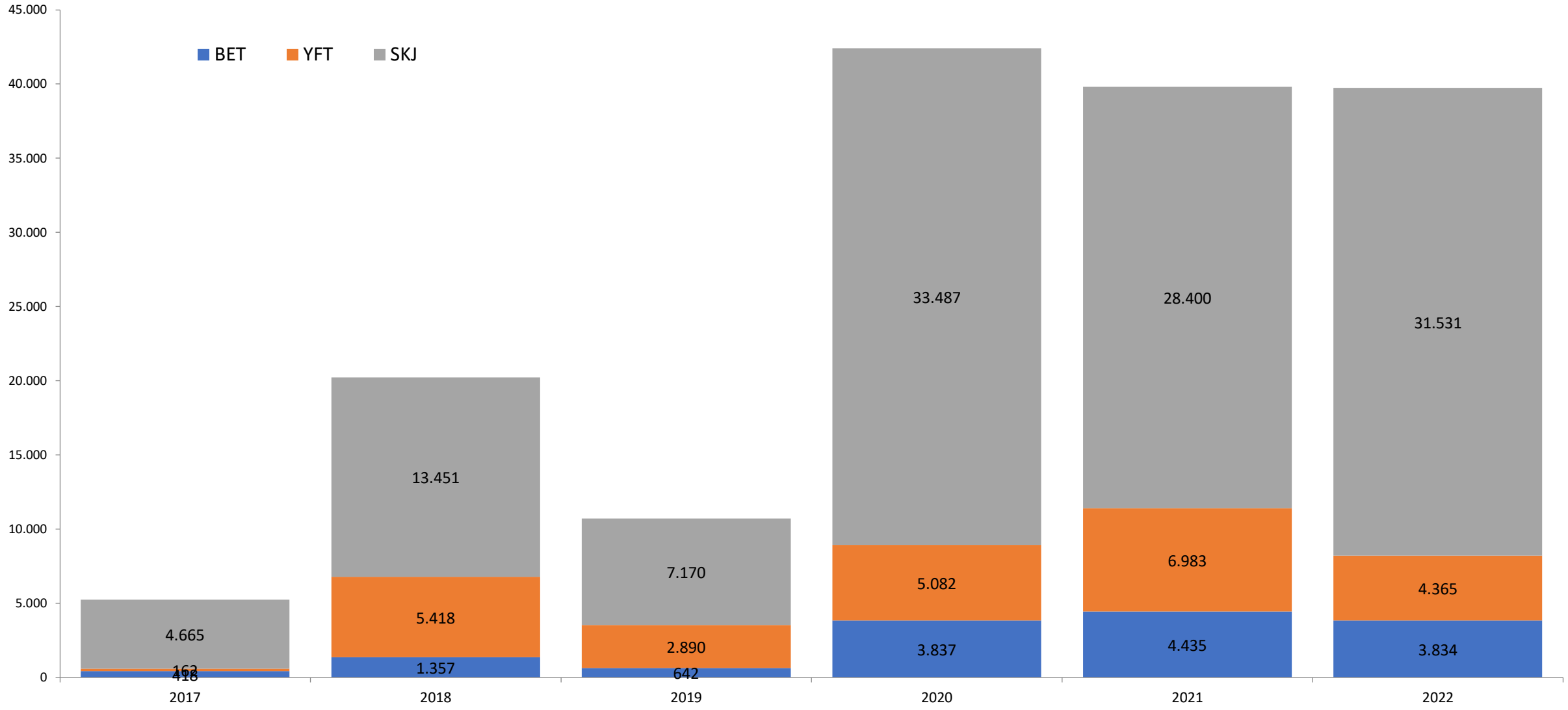
GILL NET 716-717



GILL NET 713-715

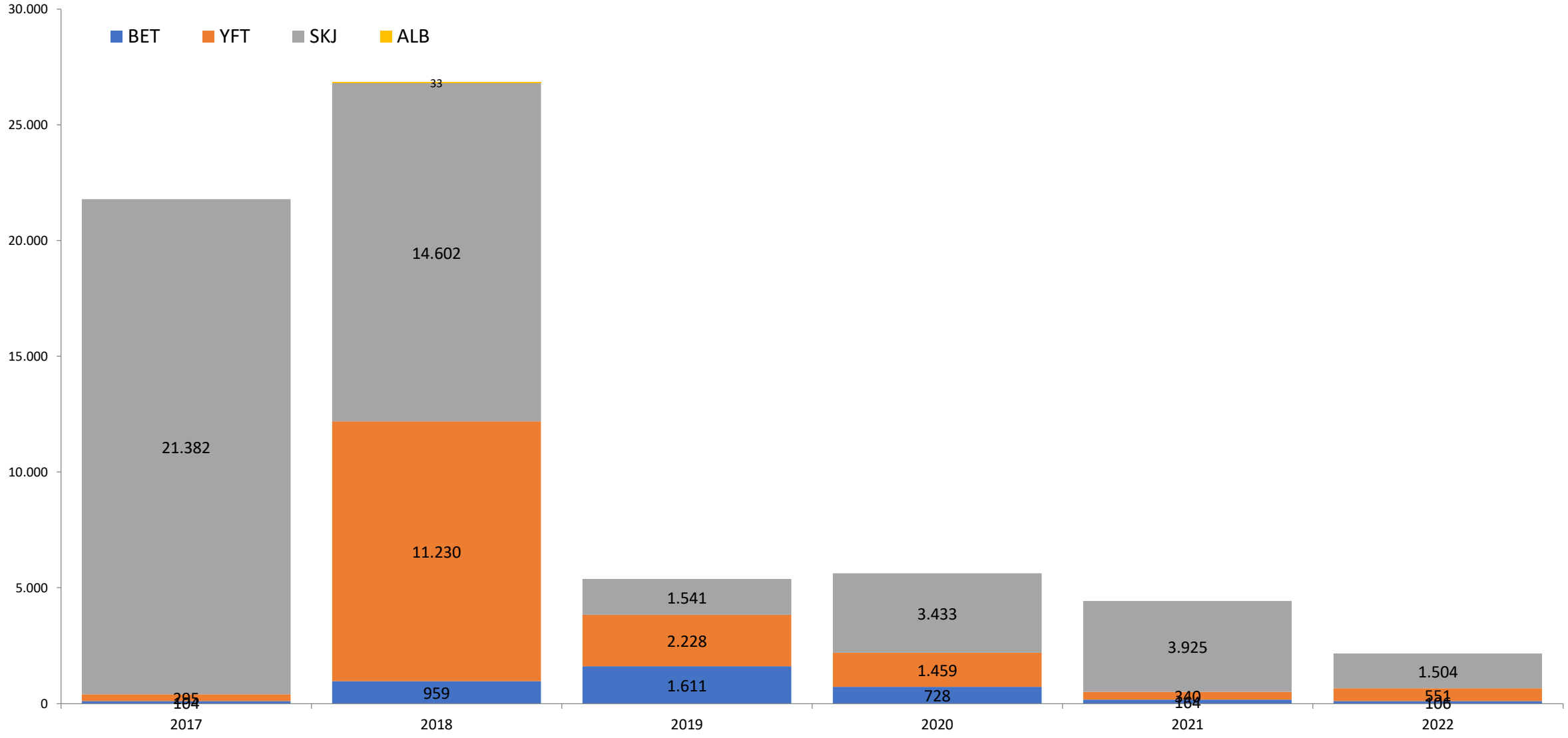


GILL NET STATISTICAL AREA

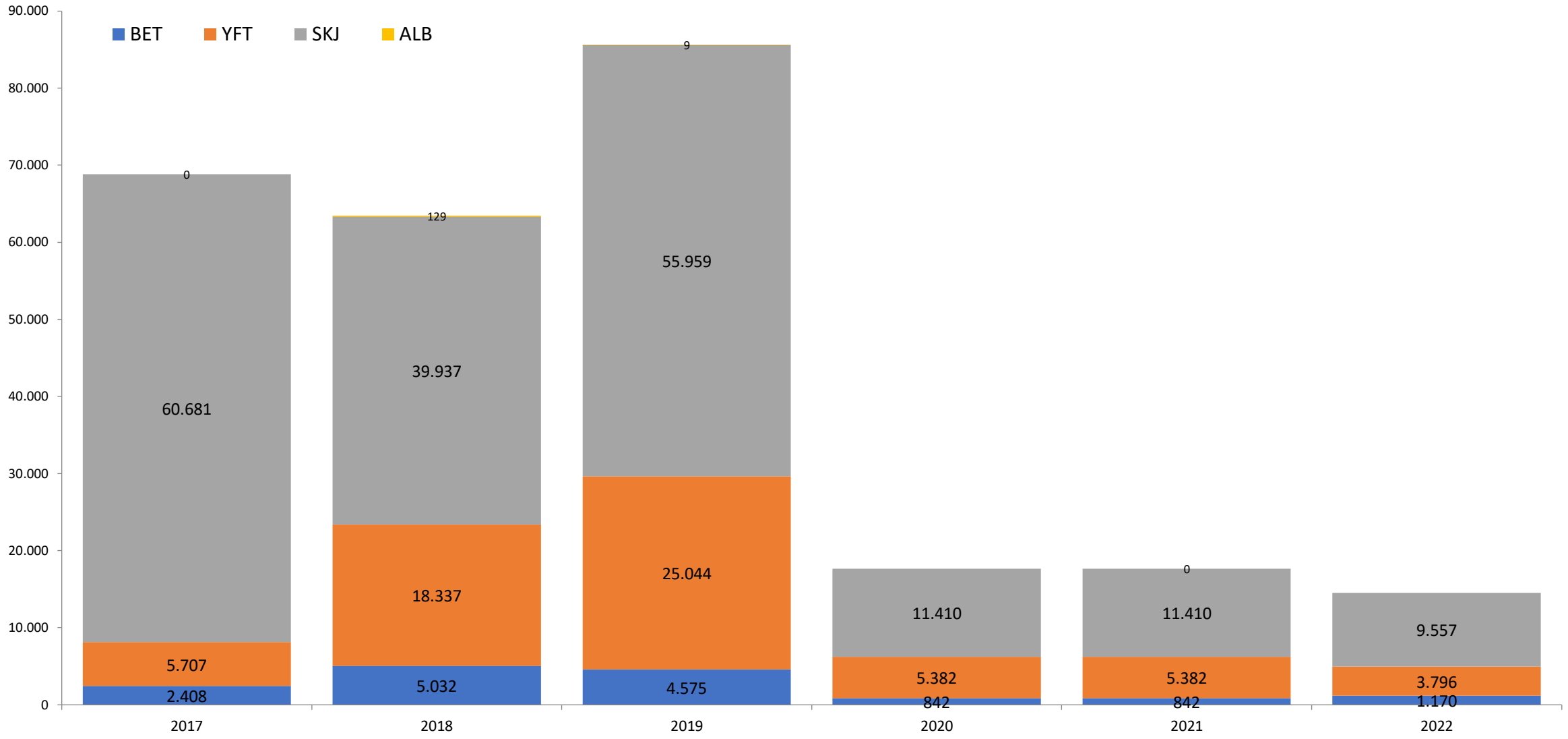


OTHERS GEAR

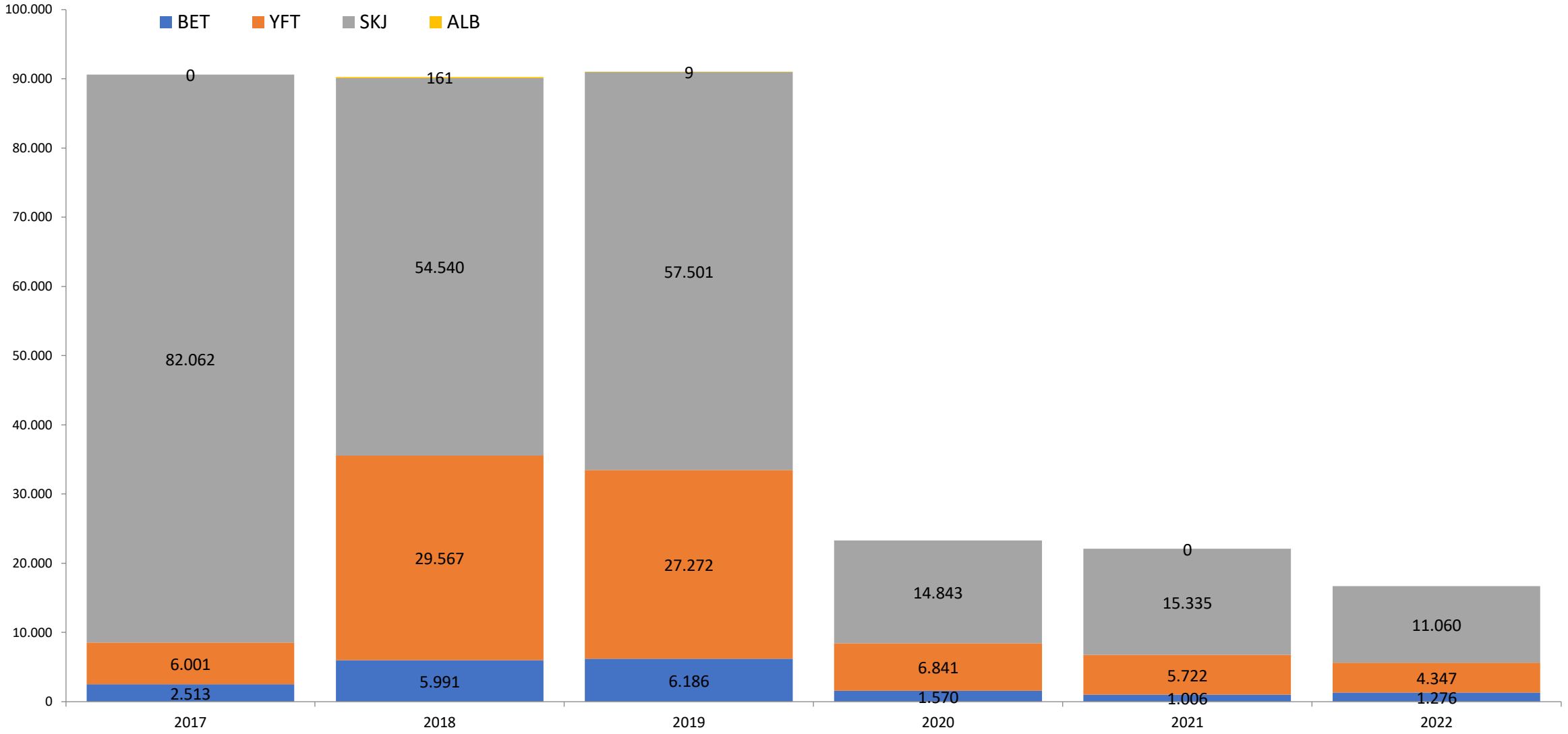
OTHERS 716-717



OTHERS 713-715



OTHERS STATISTICAL AREA



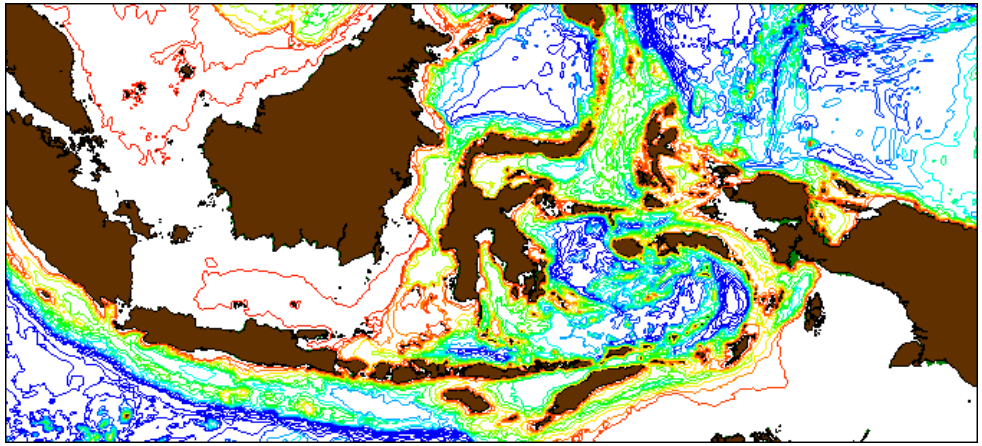
14th Indonesia Tuna Fisheries (WCPFC Area) Annual Catch Estimates Workshop

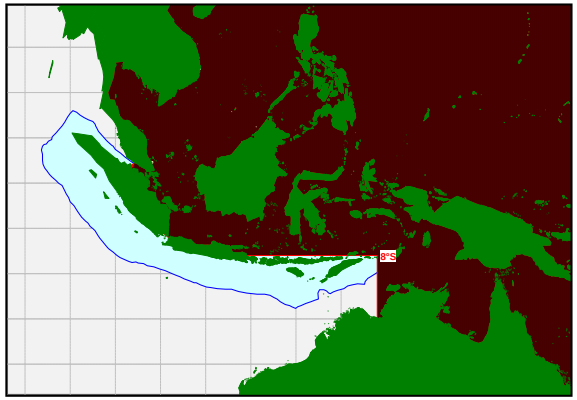
30-31 May 2023

Bogor, Indonesia

WCPFC requirements for scientific data

… and brief overview of WCPFC Tuna Fisheries – 2022





Western Central Pacific Fisheries Commission (WCPFC)

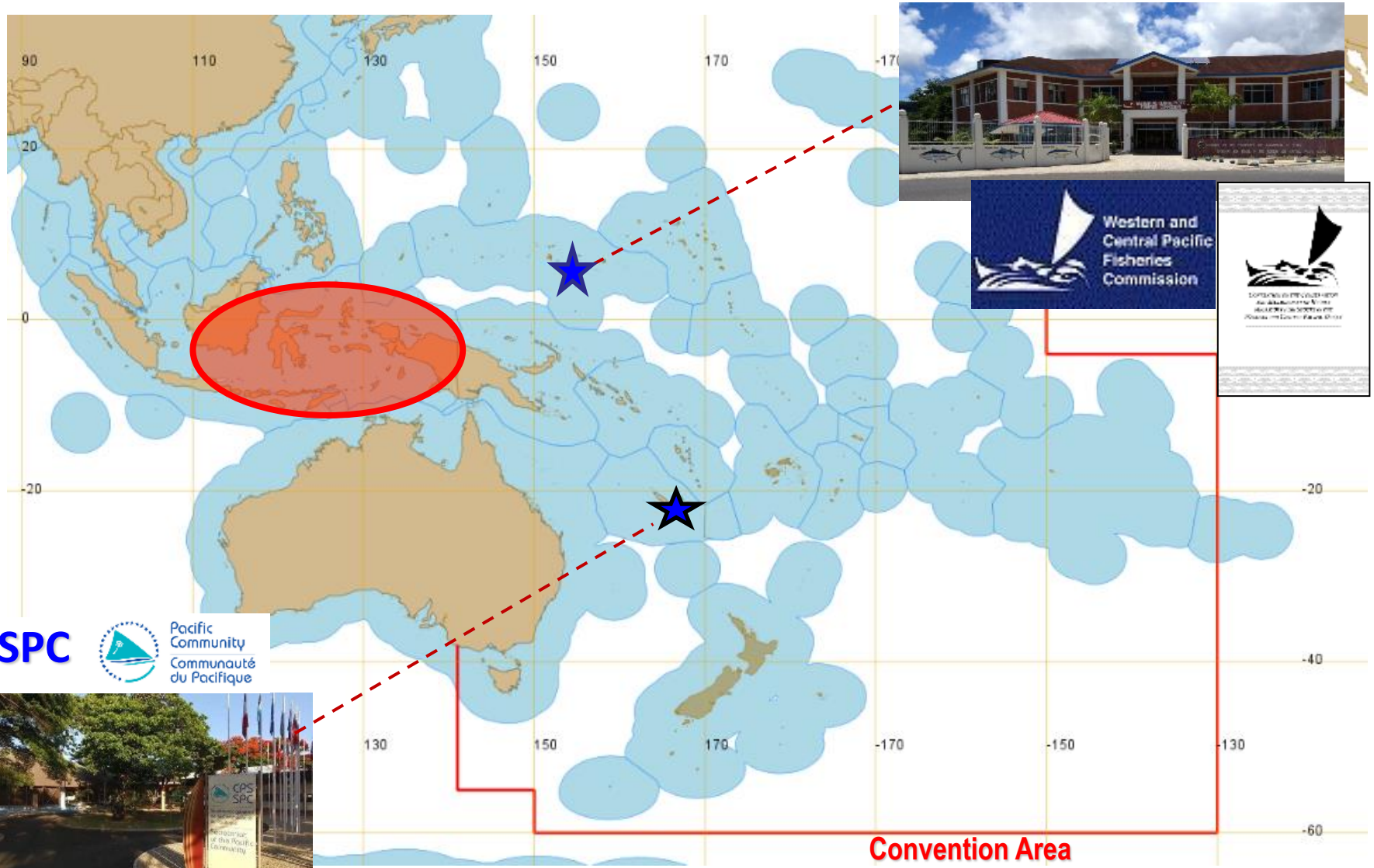
Presentation outline

About the WCPFC

Brief overview of WCPFC catch trends & tuna stock status

Importance of scientific data

WCPFC Data requirements



SPC

Pacific Community
Communauté du Pacifique

WCPFC Science service provider and data manager

WCPFC: some key statistics

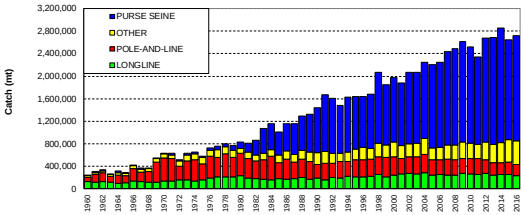
Established through the WCPFC Convention in 2004

41 seats at the table:

- 26 Members, 7 Participating Territories and 8 cooperating non-member Countries

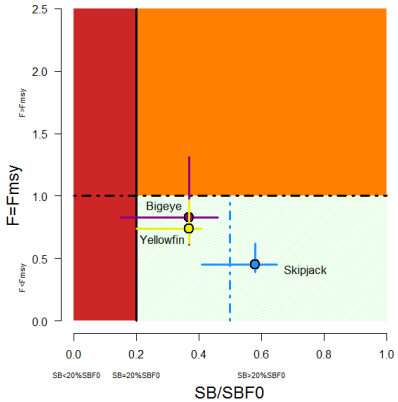
56% of the world's tuna catch: 2.96 million mt (2019)

- WPEA countries: **30%** of WCPFC catch
- Indonesia accounts for ~**17%** of WCPFC catch



Tuna fisheries provide significant food security and income for many developing states

Main tuna stocks are in reasonable condition



WCPFC – Key species

Bigeye tuna 

Skipjack tuna 

Yellowfin tuna 

Albacore tuna 

Swordfish 

Blue Marlin 

Black Marlin 

Striped Marlin 

Blue shark 

Silky shark 

Oceanic Whitetip shark 

Mako sharks (2 spp.) 

Thresher sharks (3 spp.) 

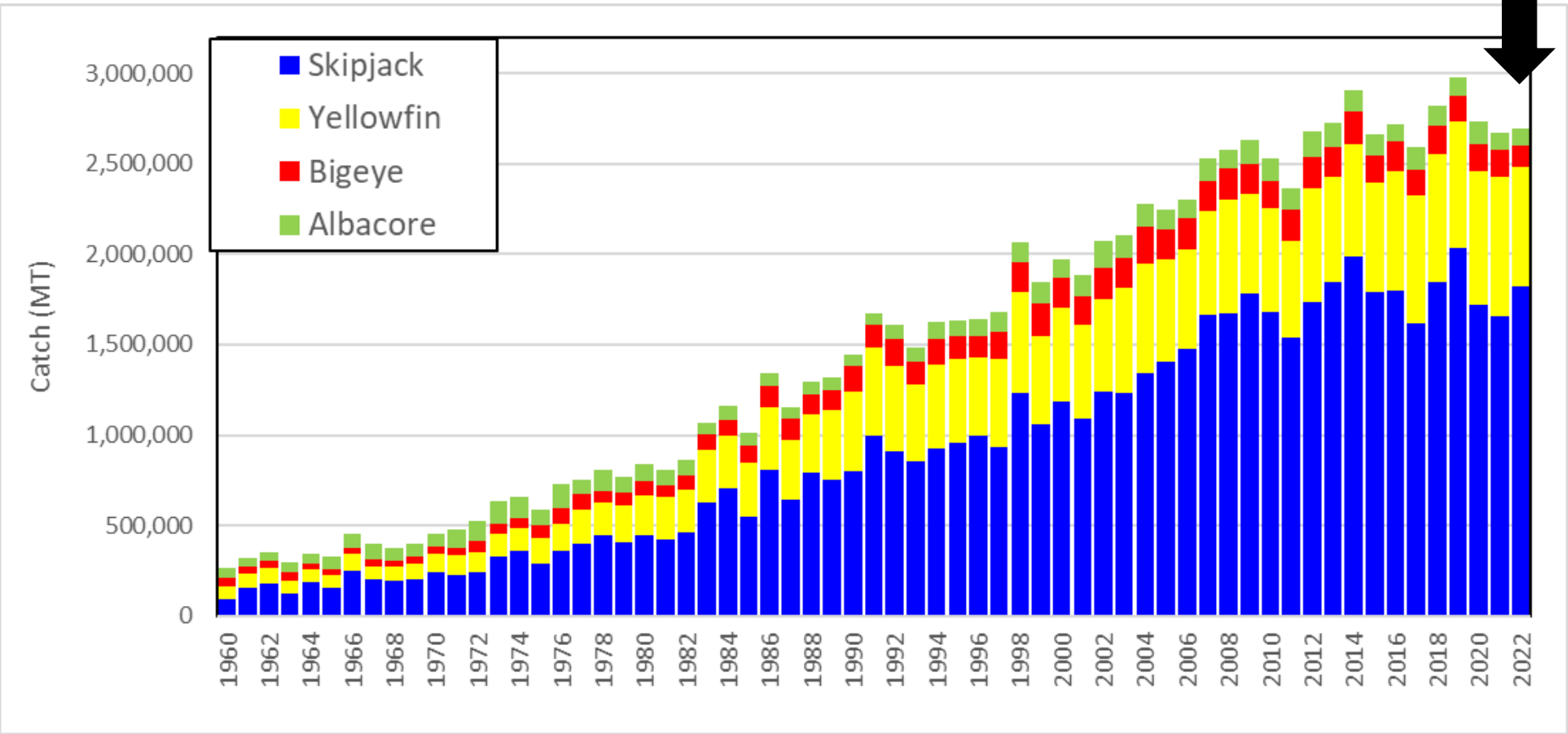
Porbeagle shark 

Hammerhead sharks (4 spp.) 

Whale shark 

Brief overview of WCPFC catch trends and tuna stock status

WCPFC Tuna Catch by Species

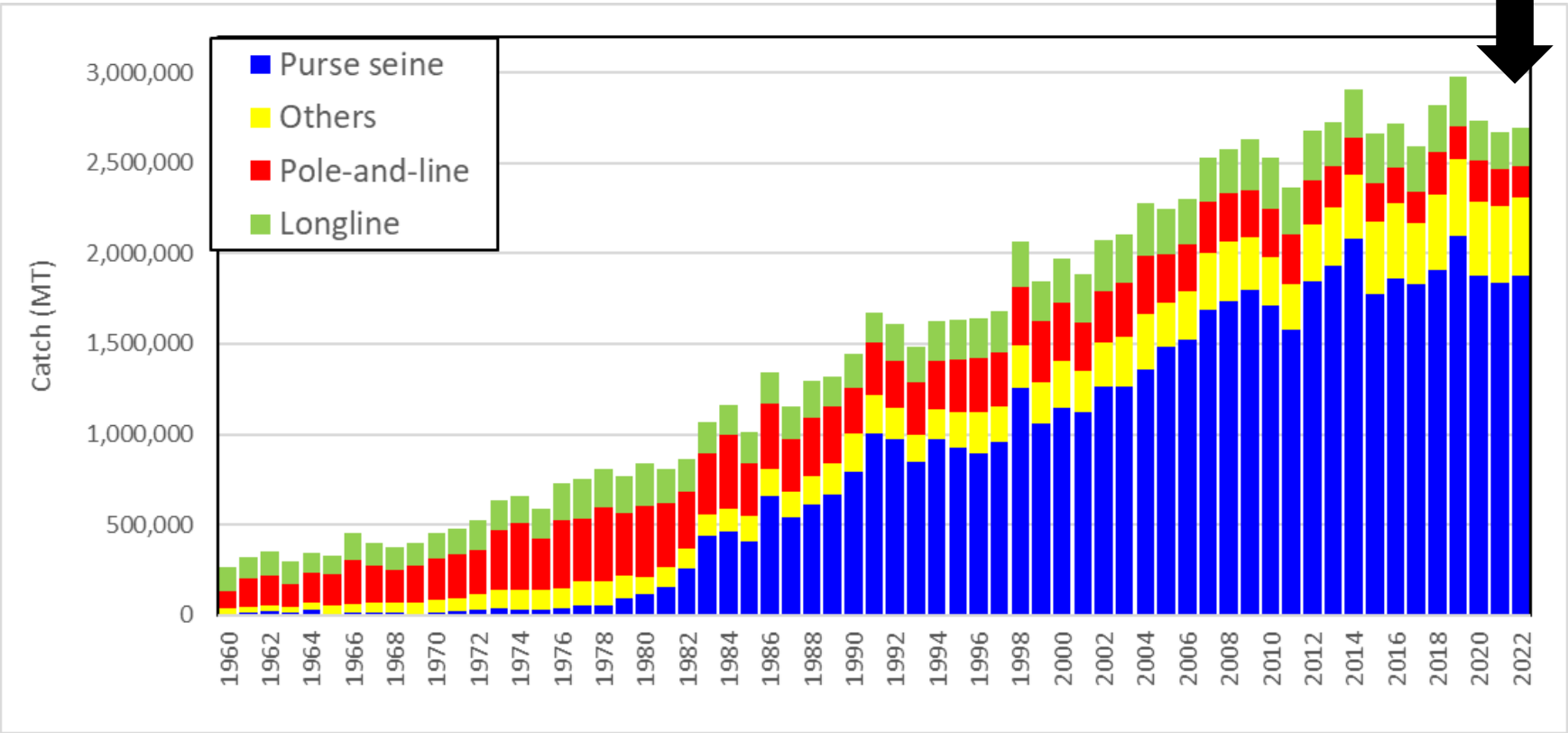


Dominated by SKIPJACK Tuna (~66% of total)

Provisional catch for 2022

- Similar to previous two years
- Nearly 300,000 t lower than record in 2019

WCPFC Tuna catch by GEAR

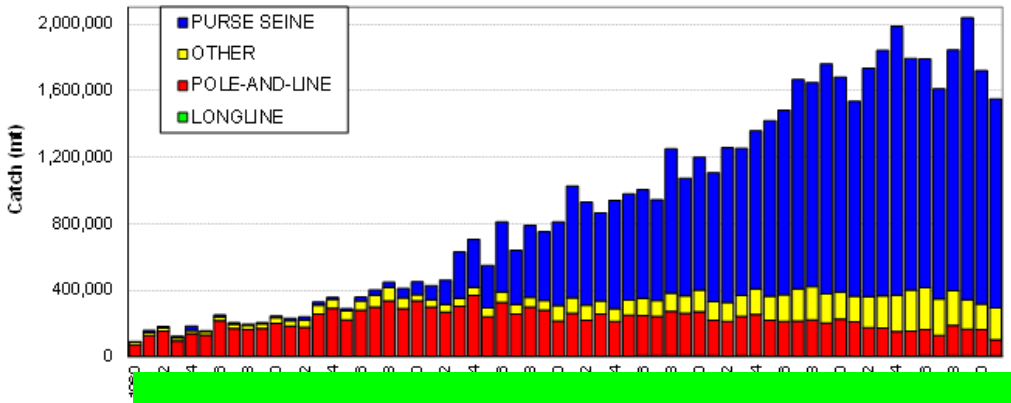


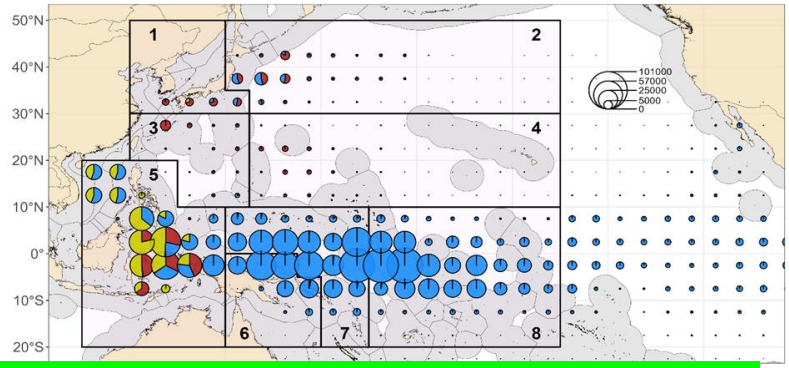
Dominated by PURSE SEINE (~70% of total)

Recent years …

- Declines in LONGLINE and POLE-AND-LINE
- Indonesia dominate “OTHER” gear catches… (small-scale/artisanal; record catches recently)

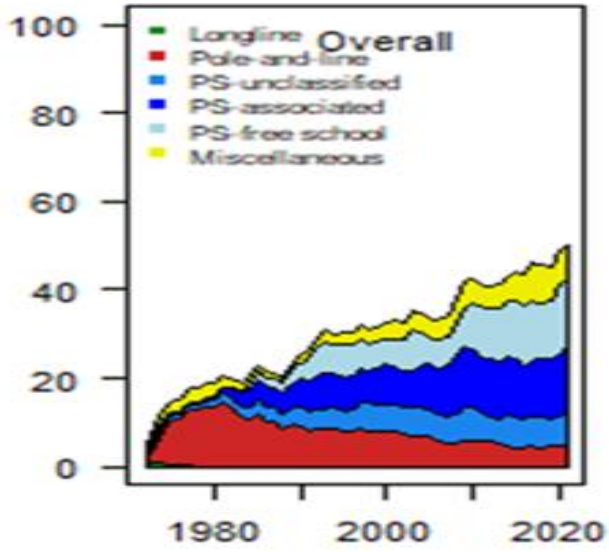
WCPFC Skipjack tuna



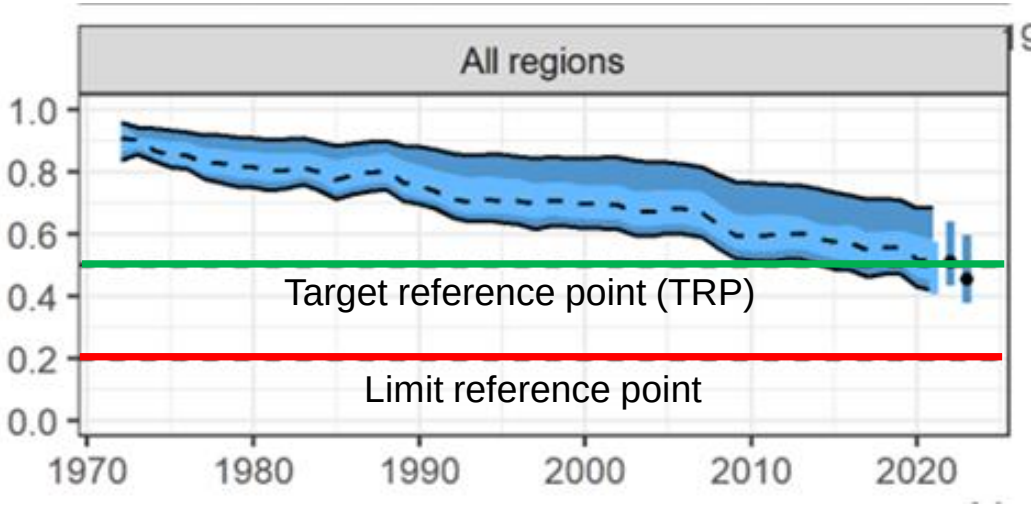


No OVERFISHING, not OVERFISHED

Stock around the TRP (2022)

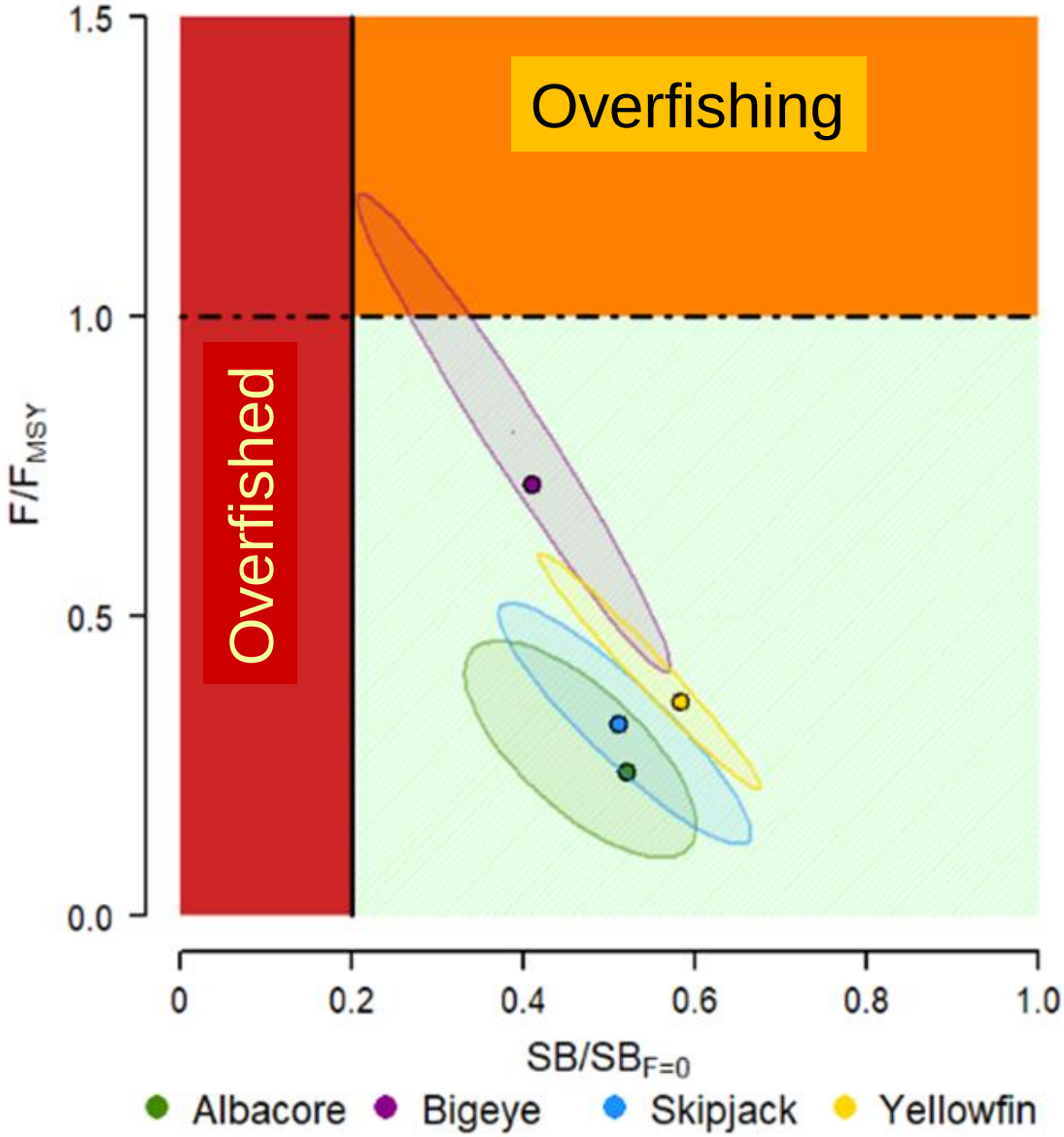


Fishery Impact



Spawning potential depletion

Status of Key Tuna Stocks



Majuro plot

Scientific data provided to the WCPFC

Reporting obligations

Types of data to be provided :

- **Annual catch estimates**
- Number of vessels active
- Operational catch and effort data (e.g. logsheet data)
- Aggregated catch and effort data (e.g. logsheet data)
- Size composition data (e.g. WPEA length data…)

Specifies the Time periods to be covered

Specifies the Species and Gears to be covered

Specifies the Time and Area stratification/resolution of the data

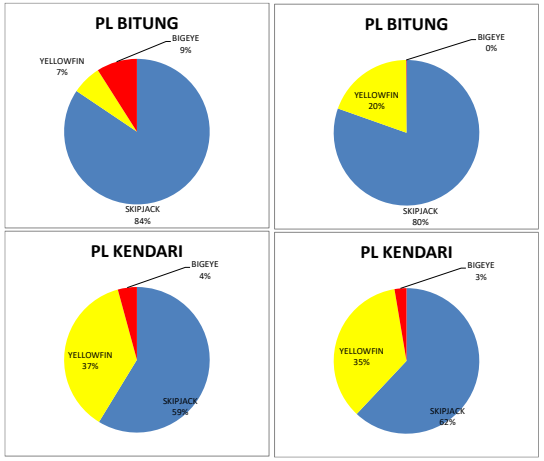
Specifies the Broad Areas to be covered

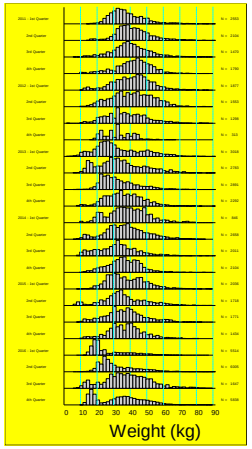
Specifies when the data need to be provided (Deadline -- 30th April each year)

Indonesia tuna fisheries data

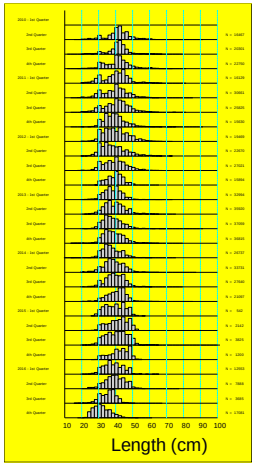
Critical for understanding tuna fishery in Indonesia

- This workshop – continual improvement in Annual Catch Estimates (ACE)
- WPEA port sampling time series was uninterrupted (until recently) since 2010
- Logbook and Observer data are also very important input
- All data are important for National analyses ! (e.g. Harvest Strategy)
- Also used in regional assessments and annual catch estimation





HL YFT size 2010-2019



P&L SKJ size 2010-2019

Indonesia tuna fisheries

WCPFC data submission – key gaps

No AGGREGATE CATCH/EFFORT data submitted

OPERATIONAL CATCH/EFFORT data

- Very low coverage
- Commercial/Industrial-level fleets
- Missing several required fields : hooks, hooks between floats, time of set, school association.

Other commercial fisheries

- Need annual catch estimates for Large-fish HANDLINE…

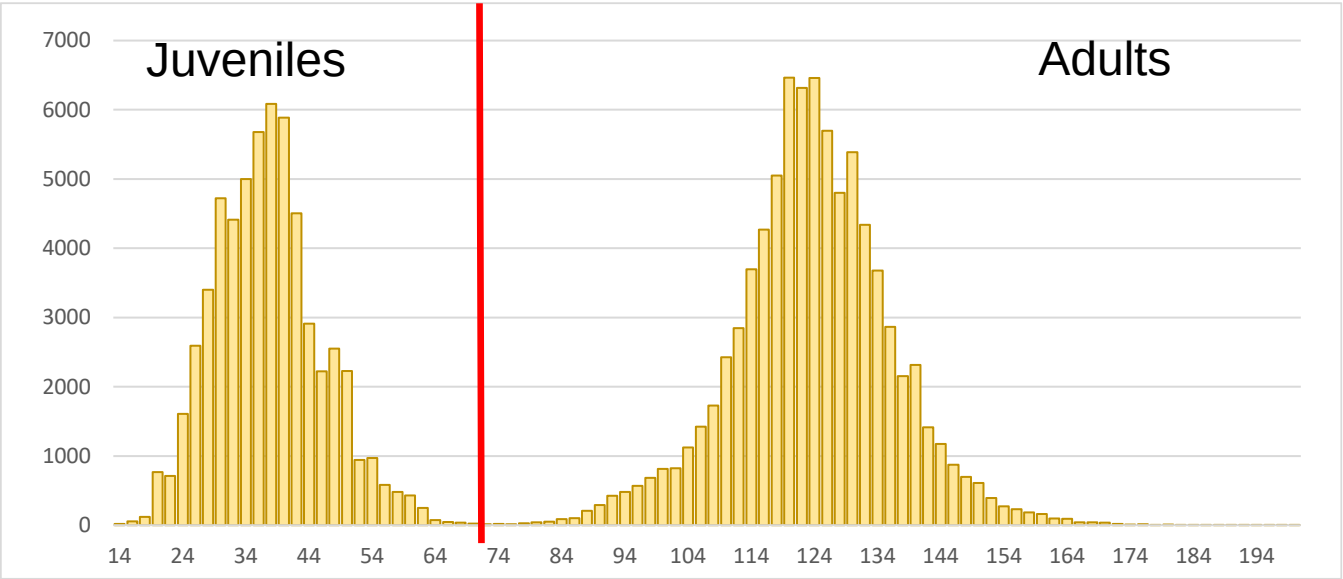
OBSERVER DATA

- No data submitted recently
- Missing key required data fields (WCPFC ROP standards)

Indonesia tuna fisheries data

Important questions / gaps

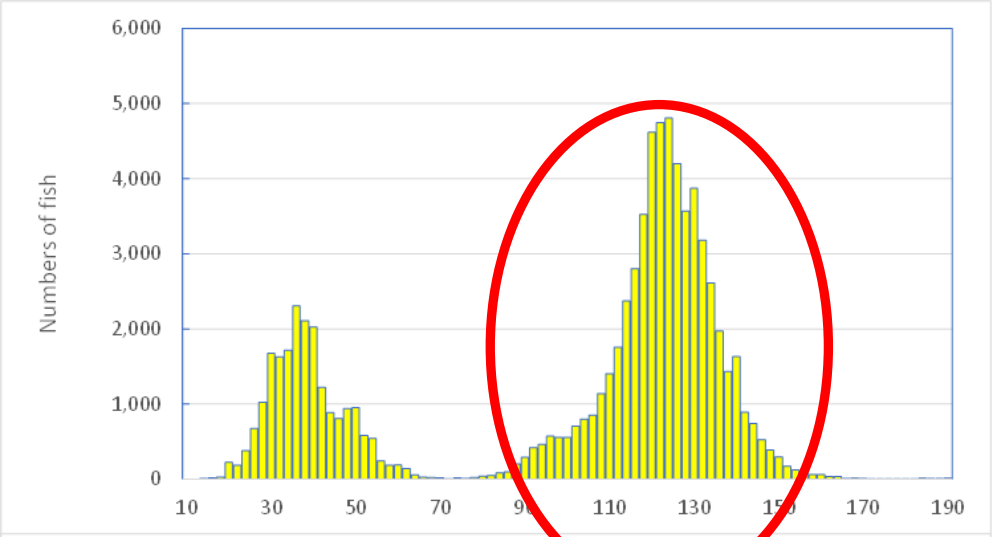
The importance of separating annual catch estimates for **Large-fish handline** and **small-fish hook-and-line/handline** gears…



Combined small-YFT and large-YFT Handline size data

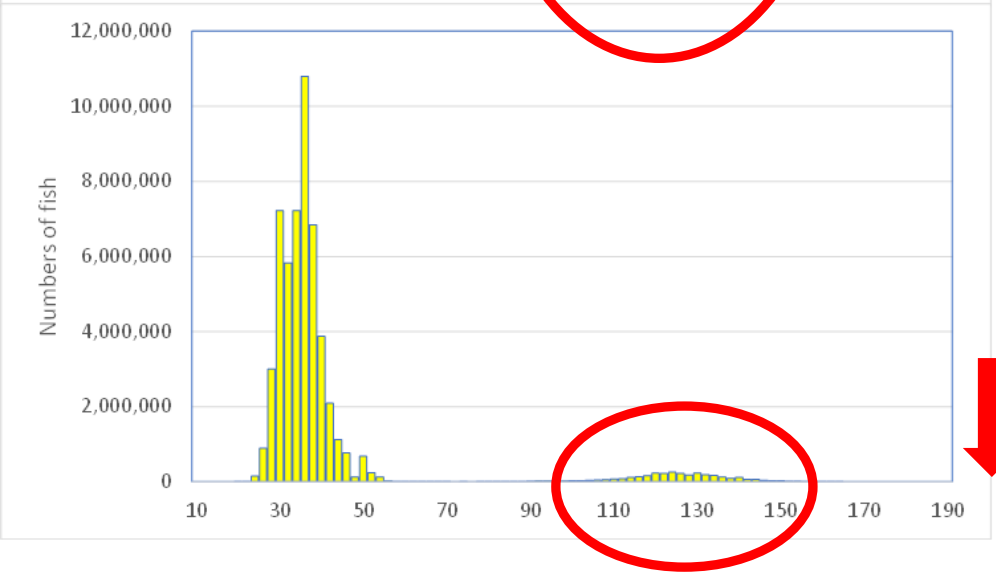
- What are catch in weight estimates for Juvenile vs Adults ?
- Significant ramifications for stock assessments !!
- Bias in sampling large-fish landings (which are easier to collect from) !!

The importance of separating annual catch estimates for **Large-fish handline** and **small-fish hook-and-line/handline** gears…



Raw, **unadjusted** size samples, 2016

(bias in sampling large-fish)



LF data **adjusted/weighted** with 2016 Yellowfin catch estimates for…

(i) large-fish handline, and
(ii) small-fish hook-and-line

Indonesia tuna fisheries data

Important questions / gaps

The importance of separating annual catch estimates for **Large-fish handline** and **small-fish hook-and-line/handline** gears…

Possible to differentiate ??

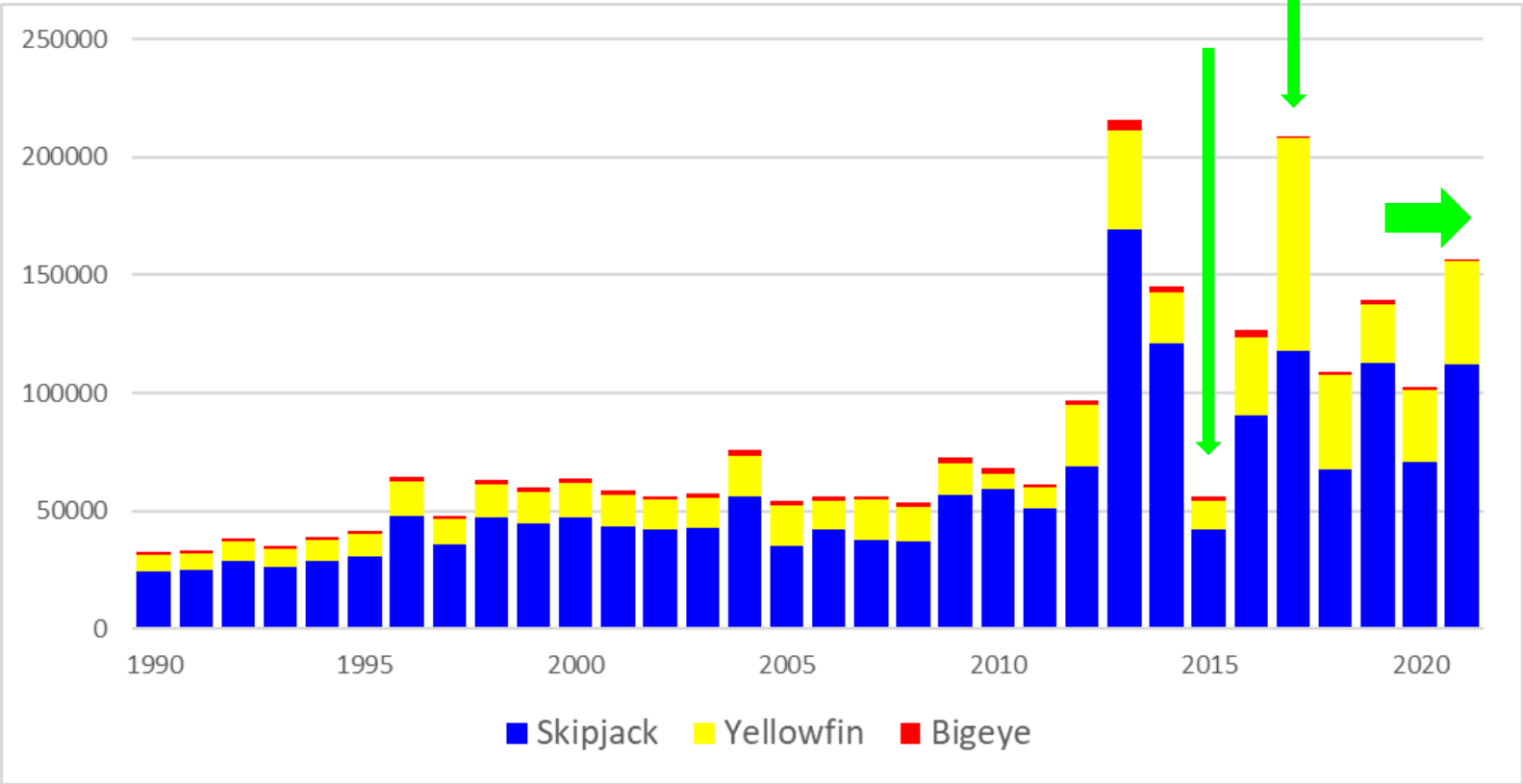
Attribute	When to assign GEAR as either …		
	Deep Large-fish Handline (H)		Surface Handline
	Larger Vessels (>= 30 GRT)	*Smaller Vessels (< 30 GRT)*	small-fish HOOK-and-LINE (K)
Size of YFT catch	Most of the catch are large YFT > 70 cms	Most of the catch are large YFT > 70 cms	Most of the catch are small TUNA (SKJ, YFT) < 70 cm
Hook size	LARGE hooks Usually single hook	LARGE hooks Usually single hook	SMALL hooks Number of hooks >=10
Species composition	Large YFT comprise most of the catch (generally > 80%)	Large YFT comprise most of the catch (generally > 80%)	Most of the catch is small tuna (SKJ, YFT). There may be some large YFT, but most of catch is small tuna.
Primary fishing period and depth	Fishing occurs mostly at day and night at a depth of more than 50 metres.	Fishing occurs mostly at day and night at a depth of more than 50 metres.	Fishing occurs mainly during the day, at the surface

Indonesia tuna fisheries data

Important questions / gaps

Past questions from Scientists and WCPFC SC on Annual Catch estimates

Why the fluctuations ?



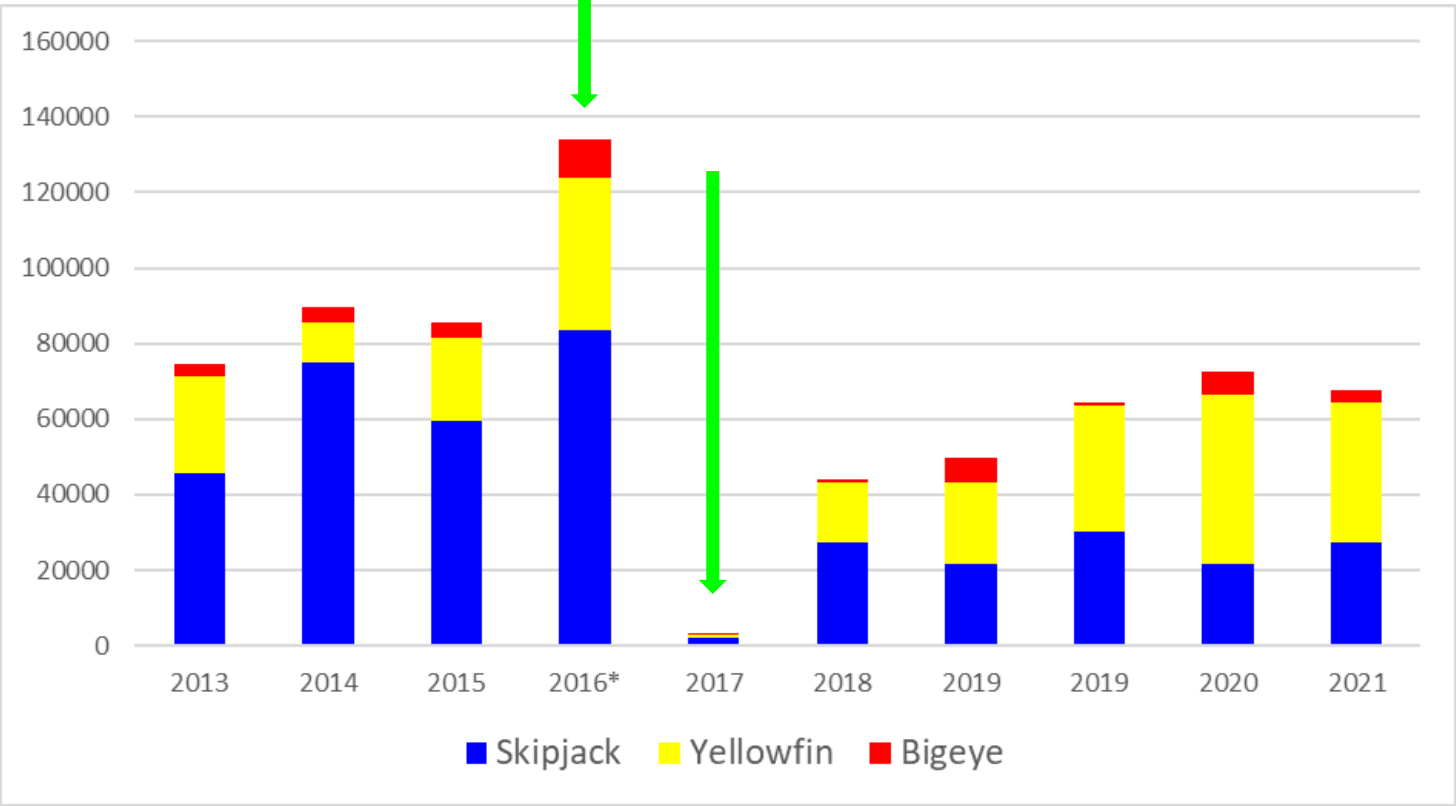
Purse seine catch : Effects of Moratorium in 2015, and some rebound in 2017 ✓ ?

Indonesia tuna fisheries data

Important questions / gaps

Past questions from Scientists and WCPFC SC on Annual Catch estimates

Why the fluctuations ?



<u>Troll catch</u> : Available data ? Differences in estimation methods ?

Indonesia tuna fisheries data

Important questions / gaps

Improving **LOGBOOK data provision** is very important to the WCPFC …

Improving **OBSERVER data provision** is very important to the WCPFC …

Clarifying "**Other Commercial fisheries**" for Indonesia with respect to the tropical tuna measure (WCPFC19 recommendation)

More information on trends in each fishery - Annual catch estimates

YOUR Estimates and Data

… a progressively useful TIME SERIES, but more work to do…

Congratulations !

TERIMA KASIH

from the Scientists (both national and WCPFC)

Directorate General of Capture Fisheries
Ministry of Marine Affairs and Fisheries

Update of Log Book and Observer Data from Indonesia's Tuna Fisheries

Presented by

Aris Budiarto
PIC on Monitoring and Analysis of Fish Resources Management

The14th Indonesian Annual Tuna Fisheries Catch Estimates Review Workshop
Bogor, May 30-31, 2023

Marine and Fisheries Ministerial Decree No. 33/2021 (*Log Book* Penangkapan Ikan)

In the Regulation of the Minister of Marine Affairs and Fisheries Number 33/2021 concerning Fishing Log Books, Monitoring onboard Fishing Vessels and Fish Transporting Vessels, Inspection, Testing, and Marking of Fishing Vessels, and Management of Fishing Vessels, it has been regulated:

1. Fishing vessels above 5 (five) GT must be equipped with a fishing log book (using an eLogbook);
2. Fishing vessels up to 5 (five) GT must be equipped with a simplified fishing log book;
3. The simplified process of filling out the log book can be done on a fishing vessel or on land after landing the fish, then submitted to the harbormaster at the fishing port, the fishing log book officer, the fishing port authority, or the fishing center authority;
4. Filling of simplified Fishing Log Book data includes basic API information, Amount and Type of Fish caught, and Fishing Locations (Grid Area); and
5. Explain the data flow starting from device preparation for eLogbook applications to the analysis and reporting process to MKP once a year.

Fishing Logbook Implementation

2010
Marine and Fisheries Ministerial Degree No. 18/2010 about Fishing Logbook

2011
SILOPI Initiation

2012
SILOPI Trials (1140 vessels)

2013
SILOPI Implementation (3272 vessels)

2014
Marine and Fisheries Ministerial Degree No. 48/2014 abaout Fishing Logbook (3730 vessels)

2015
(3.909 vessels)

2016
(4.231 vessels)

2017
(3.917 vessels)

2018
Regulation of the Director General of Capture Fisheries No 11/2018 →e-Logbook
(4.193 vessels)

2019
(5.852 vessels)

2020
(6.930 vessels)

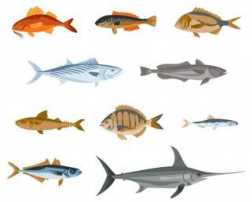
2021
- e-Reporting initiation
- SILOPI Development
(7.968 vessels)

2022
(7.970 vessels)

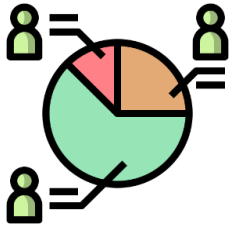
SILOPI: Fishing Logbook Information System (App)

The Role of Fishing Logbook Data in Fisheries Management

Calculate maximum sustainable yield (MSY)



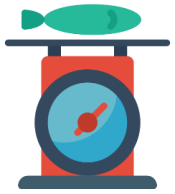
One of the data variables used in calculating fishing quotas



Fishing Logbook Data

Traceability of catches by fishermen for business purposes

Compliance with business actors for extending fishing permits



The business actors can monitor fishing operation

The Advantages of Electronic Fishing Logbook

SIMPLE
Data collection will be simpler and efficient.

PAPERLESS
Does not use any paper.

REPORT
Online report, the fishermen do not need to go the fishing port office.

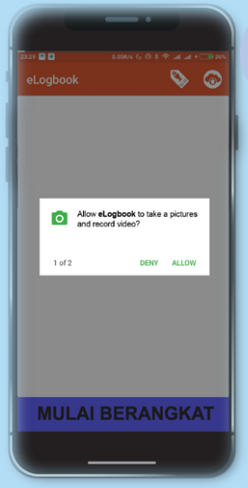
INTEGRATED
Data is integrated to Fishing Log book Information System.

OFFLINE MODE
Can be operated in offline mode and be sent when online.

e-Logbook Apps by Android System

1

The captain activates e-Log Book



2

Device synchronization

3

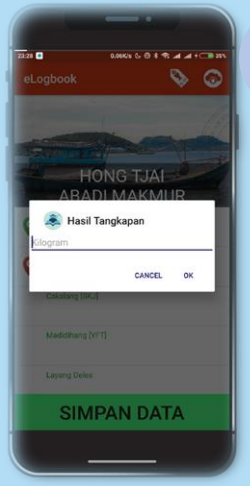
the captain is ready to leave after activation

4

Start setting

5

data collection is complete and ready to be sent



6

Input of catch

7

Start the next setting

8

"Finish Setting" after the first setting process is complete

Fishing Logbook Data Flow

(Regulation of the Director General of Capture Fisheries 11/PER-DJPT/2018)

After the captain uploads the operational data for fishing. Data is stored in SILOPI and checked for completeness

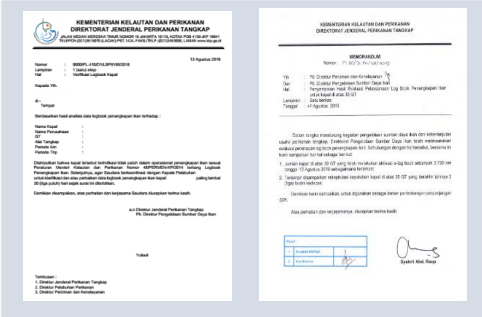
The logbook verification officer (P3T Functional and Observer) verifies the submitted data

a. **Suitability of fishing areas;**
b. **Suitability of fishing gear and types of fish landed;**
c. **Suitability of catches reported via logbook with landing data;**
d. **Suitability of size of the ship with the number of catches;**
e. **Suitability of base port; and**
f. **Suitability of data efforts**.

P3T:
Capture Fisheries Production Management Officers

Not Comply

1. Clarification;
2. Licensing recommendation;
3. Observer placement recommendation.



Comply

Logbook data analysis on a regular basis as well as other analyzes including productivity figures, open-close seasons, harvest strategy preparation, fishing quota, data reporting to RFMOs, etc.

Fishing Operational Data (LL, PS, PL, HL, TL, OTH) in WCPFC-Statistical Area

API Code	Range GT	Vessels		Trip		Setting		Vessels	Trip	Setting
		FMAs 713, 714, 715	FMAs 716, 717	FMAs 713, 714, 715	FMAs 716, 717	FMAs 713, 714, 715	FMAs 716, 717	WCPFC - Statistical Area		
LL		**17**	**19**	**32**	**113**	**342**	**1,301**	**36**	**145**	**1,643**
	<10 GT	2		2		12		2	2	12
	10-30 GT	11	15	24	104	168	1,053	26	128	1,221
	>30 GT	4	4	6	9	162	248	8	15	410
PS		**624**	**162**	**7,103**	**1,154**	**23,618**	**4,005**	**786**	**8,257**	**27,623**
	<10 GT	20	10	185	88	540	153	30	273	693
	10-30 GT	475	97	6,063	715	15,876	1,669	572	6,778	17,545
	>30 GT	129	55	855	351	7,202	2,183	184	1,206	9,385
PL		**116**	**10**	**1,643**	**90**	**6,074**	**243**	**126**	**1,733**	**6,317**
	<10 GT	9		151		749		9	151	749
	10-30 GT	44	2	544	18	1,716	39	46	562	1,755
	>30 GT	63	8	948	72	3,609	204	71	1,020	3,813
HL		**468**	**268**	**3,295**	**1,111**	**24,775**	**7,390**	**736**	**4,406**	**32,165**
	<10 GT	144	59	1,252	425	8,308	1,991	203	1,677	10,299
	10-30 GT	303	187	1,982	626	15,875	4,674	490	2,608	20,549
	>30 GT	21	22	61	60	592	725	43	121	1,317
TL		**33**		**165**		**1,161**		**33**	**165**	**1,161**
	<10 GT	1		2		14		1	2	14
	10-30 GT	32		163		1,147		32	163	1,147
OTH		**143**	**2**	**393**	**12**	**3,008**	**174**	**145**	**405**	**3,182**
	<10 GT	9		18		72		9	18	72
	10-30 GT	64	1	288	11	1,971	173	65	299	2,144
	>30 GT	70	1	87	1	965	1	71	88	966
Grand Total		**1401**	**461**	**12631**	**2480**	**58978**	**13113**	**1862**	**15111**	**72091**

Source : Fishing Log Book Data for 2022

Tuna Catch Composition Data (LL, PS, PL, HL, TL, OTH) in WCPFC-Statistical Area

API Code	Range GT	FMAs 713, 714, 715					FMAs 716, 717					WCPFC - Statistical Area				
		Tuna				Tuna Total	Tuna				Tuna Total	Tuna				Tuna Total
		SKJ	YFT	BET	ALB		SKJ	YFT	BET	ALB		SKJ	YFT	BET	ALB	
LL		**0.03**	**39.95**	**5.94**	**0.00**	**45.92**	**0.46**	**117.64**	**154.64**	**1.82**	**274.56**	**0.49**	**157.59**	**160.57**	**1.82**	**320.47**
	<10 GT	0.029	0	0	0	0.029	0	0	0	0	0	0.03	0.00	0.00	0.00	0.03
	10-30 GT	0	19.904	2.926	0	22.83	0	96.665	141.6	0	238.265	0.00	116.57	144.53	0.00	261.10
	>30 GT	0	20.045	3.011	0	23.056	0.46	20.974	13.036	1.82	36.29	0.46	41.02	16.05	1.82	59.35
PS		**7875.40**	**2507.94**	**19.86**	**3.15**	**10406.35**	**8126.33**	**2026.36**	**5.55**	**0.00**	**10158.24**	**16001.72**	**4534.30**	**25.41**	**3.15**	**20564.59**
	<10 GT	0.65	0.25	0	0	0.9	2.163	0	0	0	2.163	2.81	0.25	0.00	0.00	3.06
	10-30 GT	2082.74	378.919	0.607	3.1	2465.362	653.287	73.421	0	0	726.708	2736.02	452.34	0.61	3.10	3192.07
	>30 GT	5792.01	2128.77	19.253	0.05	7940.085	7470.88	1952.94	5.55	0	9429.37	13262.89	4081.71	24.80	0.05	17369.46
PL		**5142.21**	**1720.04**	**0.23**	**0.00**	**6862.48**	**456.35**	**303.30**	**0.00**	**0.00**	**759.65**	**5598.56**	**2023.34**	**0.23**	**0.00**	**7622.13**
	<10 GT	239.867	109.123	0.05	0	349.04	0	0	0	0	0	239.87	109.12	0.05	0.00	349.04
	10-30 GT	1376.22	135.836	0.184	0	1512.2449	38.55	2.4	0	0	40.95	1414.77	138.24	0.18	0.00	1553.19
	>30 GT	3526.12	1475.08	0	0	5001.195	417.8	300.9	0	0	718.7	3943.92	1775.98	0.00	0.00	5719.90
HL		**89.43**	**4864.24**	**43.64**	**9.03**	**5006.33**	**926.93**	**2019.06**	**4.20**	**0.41**	**2950.61**	**1016.36**	**6883.30**	**47.84**	**9.44**	**7956.94**
	<10 GT	18.502	862.513	10.088	2.086	893.189	754.621	180.24	0	0	934.861	773.12	1042.75	10.09	2.09	1828.05
	10-30 GT	70.924	3791.02	27.295	6.544	3895.783	145.031	1404.16	4.099	0.414	1553.708	215.96	5195.18	31.39	6.96	5449.49
	>30 GT	0	210.703	6.258	0.399	217.36	27.28	434.656	0.1	0	462.036	27.28	645.36	6.36	0.40	679.40
TL		**105.19**	**140.94**	**10.88**	**0.00**	**257.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**105.19**	**140.94**	**10.88**	**0.00**	**257.00**
	<10 GT	4.52	0	0	0	4.52	0	0	0	0	0	4.52	0.00	0.00	0.00	4.52
	10-30 GT	100.671	140.935	10.878	0	252.484	0	0	0	0	0	100.67	140.94	10.88	0.00	252.48
OTH		**7.14**	**5.07**	**0.00**	**0.00**	**12.21**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**7.14**	**5.07**	**0.00**	**0.00**	**12.21**
	10-30 GT	0.61	0.52	0	0	1.13	0	0	0	0	0	0.61	0.52	0.00	0.00	1.13
	>30 GT	6.525	4.55	0	0	11.075	0	0	0	0	0	6.53	4.55	0.00	0.00	11.08
	Grand Total		**9278.17**	**80.55**	**12.18**	**22590.283**	**9510.07**	**4466.36**	**164.385**	**2.234**	**14143.051**	**9510.07**	**13744.53**	**244.94**	**14.41**	**36733.33**

Source : Fishing Log Book Data for 2022

Billfish Catch Composition Data (LL, PS, PL, HL, TL, OTH) in WCPFC-Statistical Area

API Code	Range GT	FMAs 713, 714, 715							FMAs 716, 717							WCPFC - Statistical Area						
		Billfish						Billfish	Billfish						Billfish	Billfish						Billfish
		BLM	BUM	MLS	SFA	SSP	SWO	Total	BLM	BUM	MLS	SFA	SSP	SWO	Total	BLM	BUM	MLS	SFA	SSP	SWO	Total
LL		**0.85**	**0.00**	**0.14**	**2.08**	**0.00**	**38.26**	**41.32**	**1.48**	**0.11**	**0.04**	**4.67**	**0.01**	**93.47**	**99.77**	**2.32**	**0.11**	**0.17**	**6.75**	**0.01**	**131.73**	**141.09**
	<10 GT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	10-30 GT	0.847	0	0.135	0.2	0	3.33	4.512	0.975	0	0	3.692	0	87.57	92.233	1.82	0.00	0.14	3.89	0.00	90.90	96.75
	>30 GT	0	0	0	1.877	0	34.929	36.806	0.5	0.105	0.035	0.98	0.01	5.906	7.536	0.50	0.11	0.04	2.86	0.01	40.84	44.34
PS		**0.00**	**0.00**	**0.00**	**0.02**	**0.00**	**0.00**	**0.02**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.02**	**0.00**	**0.00**	**0.02**
	10-30 GT	0	0	0	0.015	0	0	0.015	0	0	0	0	0	0	0	0.00	0.00	0.00	0.02	0.00	0.00	0.02
HL		**3.08**	**13.16**	**0.00**	**0.87**	**0.00**	**8.94**	**26.05**	**0.05**	**2.00**	**0.00**	**5.31**	**0.00**	**1.69**	**9.04**	**3.12**	**15.16**	**0.00**	**6.19**	**0.00**	**10.63**	**35.10**
	<10 GT	0.59	0.495	0	0.02	0	0	1.105	0	0.533	0	4.684	0	0	5.217	0.59	1.03	0.00	4.70	0.00	0.00	6.32
	10-30 GT	2.489	8.33	0	0.853	0	8.558	20.23	0.045	1.466	0	0.605	0	1.685	3.801	2.53	9.80	0.00	1.46	0.00	10.24	24.03
	>30 GT	0	4.334	0	0	0	0.384	4.718	0	0	0	0.025	0	0	0.025	0.00	4.33	0.00	0.03	0.00	0.38	4.74
TL		**0.95**	**0.27**	**0.00**	**0.57**	**0.00**	**0.03**	**1.81**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.95**	**0.27**	**0.00**	**0.57**	**0.00**	**0.03**	**1.81**
	10-30 GT	0.945	0.265	0	0.569	0	0.03	1.809	0	0	0	0	0	0	0	0.95	0.27	0.00	0.57	0.00	0.03	1.81
OTH		**0.00**	**0.31**	**0.00**	**0.33**	**0.00**	**0.00**	**0.64**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.31**	**0.00**	**0.33**	**0.00**	**0.00**	**0.64**
	10-30 GT	0	0	0	0.119	0	0	0.119	0	0	0	0	0	0	0	0.00	0.00	0.00	0.12	0.00	0.00	0.12
	>30 GT	0	0.31	0	0.215	0	0	0.525	0	0	0	0	0	0	0	0.00	0.31	0.00	0.22	0.00	0.00	0.53
Grand Total		**4.871**	**13.734**	**0.135**	**3.868**	**0**	**47.231**	**69.839**	**1.52**	**2.104**	**0.035**	**9.986**	**0.01**	**95.16**	**108.81**	**6.39**	**15.84**	**0.17**	**13.85**	**0.01**	**142.39**	**178.65**

Source : Fishing Log Book Data for 2022

Neritic Tuna Catch Composition Data (LL, PS, PL, HL, TL, OTH) in WCPFC-Statistical Area

API Code	Range GT	FMAs 713, 714, 715								As 716, 717						WCPFC - Statistical Area							
		Neritic Tuna							Neritic Tuna	Neritic Tuna					Neritic	Neritic Tuna							Neritic Tuna
		FRI	BLT	COM	DOT	GUT	KAW	LOT	Total	FRI	BLT	COM	KAW	LOT	Tuna Total	FRI	BLT	COM	DOT	GUT	KAW	LOT	Total
LL		**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.10**	**0.00**	**0.10**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.10**	**0.00**	**0.10**
	<10 GT	0	0	0	0	0	0.096	0	0.096	0	0	0	0	0	0	0.00	0.00	0.00	0	0	0.10	0.00	0.10
	10-30 G	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00	0.00	0.00	0	0	0.00	0.00	0.00
PS		**591.19**	**1961.92**	**4.95**	**1.15**	**0.23**	**606.42**	**1362.85**	**4528.72**	**421.27**	**92.89**	**2.89**	**139.34**	**162.11**	**818.50**	**1012.46**	**2054.81**	**7.85**	**1.15**	**0.23**	**745.76**	**1524.96**	**5347.22**
	<10 GT	8.68	7.28	0	0	0	6.08	19.53	41.57	0	1.9	0	0.25	0.5	2.65	8.68	9.18	0.00	0	0	6.33	20.03	44.22
	10-30 G	375.2	1200.4	3.954	1.15	0.233	177.776	435.021	2193.736	139.24	25.938	2.54	0.9	58.6	227.214	514.47	1226.31	6.49	1.15	0.23	178.68	493.62	2420.95
	>30 GT	207.3	754.28	1	0	0	422.565	908.297	2293.418	282.03	65.05	0.354	138.2	103	588.634	489.31	819.33	1.35	0	0	560.76	1011.31	2882.05
PL		**51.85**	**95.34**	**0.00**	**0.00**	**0.00**	**18.78**	**2.42**	**168.39**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**51.85**	**95.34**	**0.00**	**0.00**	**0.00**	**18.78**	**2.42**	**168.39**
	<10 GT	5.544	5.87	0	0	0	0.21	1	12.624	0	0	0	0	0	0	5.54	5.87	0.00	0	0	0.21	1.00	12.62
	10-30 G	13.13	73.073	0	0	0	15.053	0.44	101.694	0	0	0	0	0	0	13.13	73.07	0.00	0	0	15.05	0.44	101.69
	>30 GT	33.18	16.393	0	0	0	3.521	0.984	54.075	0	0	0	0	0	0	33.18	16.39	0.00	0	0	3.52	0.98	54.08
HL		**0.05**	**0.21**	**0.46**	**0.00**	**0.00**	**0.50**	**0.85**	**2.07**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.05**	**0.21**	**0.46**	**0.00**	**0.00**	**0.50**	**0.85**	**2.07**
	<10 GT	0.052	0.009	0.01	0	0	0.003	0.04	0.114	0	0	0	0	0	0	0.05	0.01	0.01	0	0	0.00	0.04	0.11
	10-30 G	0	0.2	0.45	0	0	0.5	0.809	1.959	0	0	0	0	0	0	0.00	0.20	0.45	0	0	0.50	0.81	1.96
	>30 GT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00	0.00	0.00	0	0	0.00	0.00	0.00
TL		**0.00**	**0.00**	**0.01**	**0.00**	**0.00**	**0.15**	**5.50**	**5.66**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.01**	**0.00**	**0.00**	**0.15**	**5.50**	**5.66**
	<10 GT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00	0.00	0.00	0	0	0.00	0.00	0.00
	10-30 G	0	0	0.01	0	0	0.15	5.502	5.662	0	0	0	0	0	0	0.00	0.00	0.01	0	0	0.15	5.50	5.66
OTH		**0.50**	**0.21**	**2.60**	**0.00**	**0.00**	**5.76**	**26.00**	**35.08**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.50**	**0.21**	**2.60**	**0.00**	**0.00**	**5.76**	**26.00**	**35.08**
	10-30 G	0.5	0.21	0.32	0	0	2.239	0	3.269	0	0	0	0	0	0	0.50	0.21	0.32	0	0	2.24	0.00	3.27
	>30 GT	0	0	2.284	0	0	3.525	26	31.809	0	0	0	0	0	0	0.00	0.00	2.28	0	0	3.53	26.00	31.81
Grand Total		**643.6**	**2057.7**	**8.028**	**1.15**	**0.233**	**631.718**	**1397.62**	**4740.026**	**421.27**	**92.888**	**2.894**	**139.3**	**162.1**	**818.498**	**1064.86**	**2150.57**	**10.92**	**1.15**	**0.23**	**771.06**	**1559.73**	**5558.52**

Source : Fishing Log Book Data for 2022

Shark Catch Composition Data (LL, PS, PL, HL, TL, OTH) in WCPFC-Statistical Area

API Code	Range GT	FMAs 713, 714, 715			FMAs 716, 717			FMAs 713, 714, 715			
		Shark		Shark	Shark		Shark	Shark			Shark
		MAK	TIG	Total	FAL	MAK	Total	MAK	TIG	FAL	Total
LL		**0.00**	**0.00**	**0.00**	**0.25**	**0.00**	**0.25**	**0.00**	**0.00**	**0.25**	**0.25**
	>30 GT	0	0	0	0.245	0	0.245	0.00	0	0.245	0.25
HL		**0.00**	**0.00**	**0.00**	**0.00**	**0.16**	**0.16**	**0.16**	**0.00**	**0.00**	**0.16**
	<10 GT	0	0	0	0	0.16	0.16	0.16	0	0	0.16
	10-30 G	0	0	0	0	0	0	0.00	0	0	0.00
Grand Total		**0**	**0**	**0**	**0.245**	**0.16**	**0.405**	**0.16**	**0**	**0.245**	**0.41**

Source : Fishing Log Book Data for 2022

OBSERVER

Distribution of Observer 2023

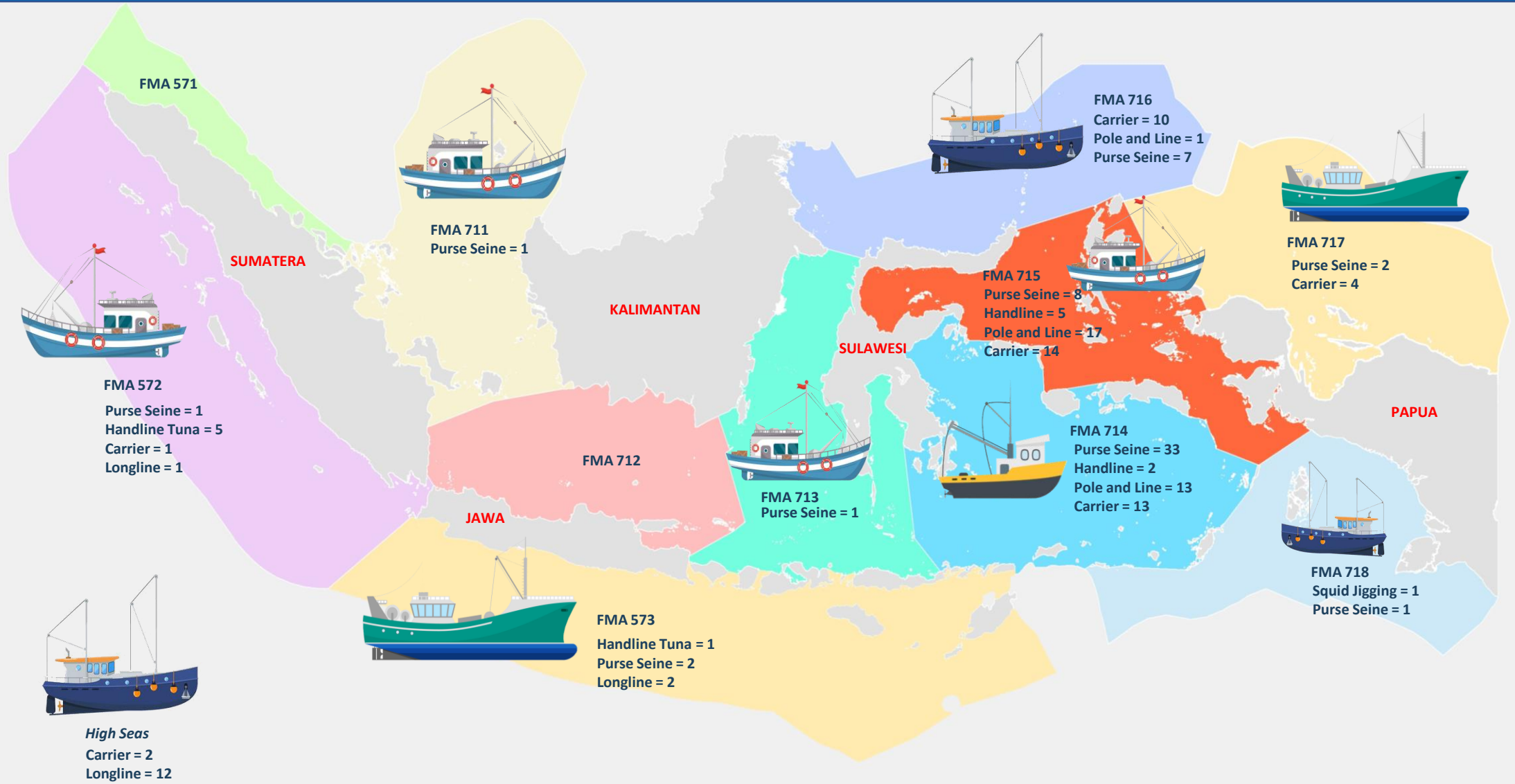
27 Fishing Port

78 Observer’s

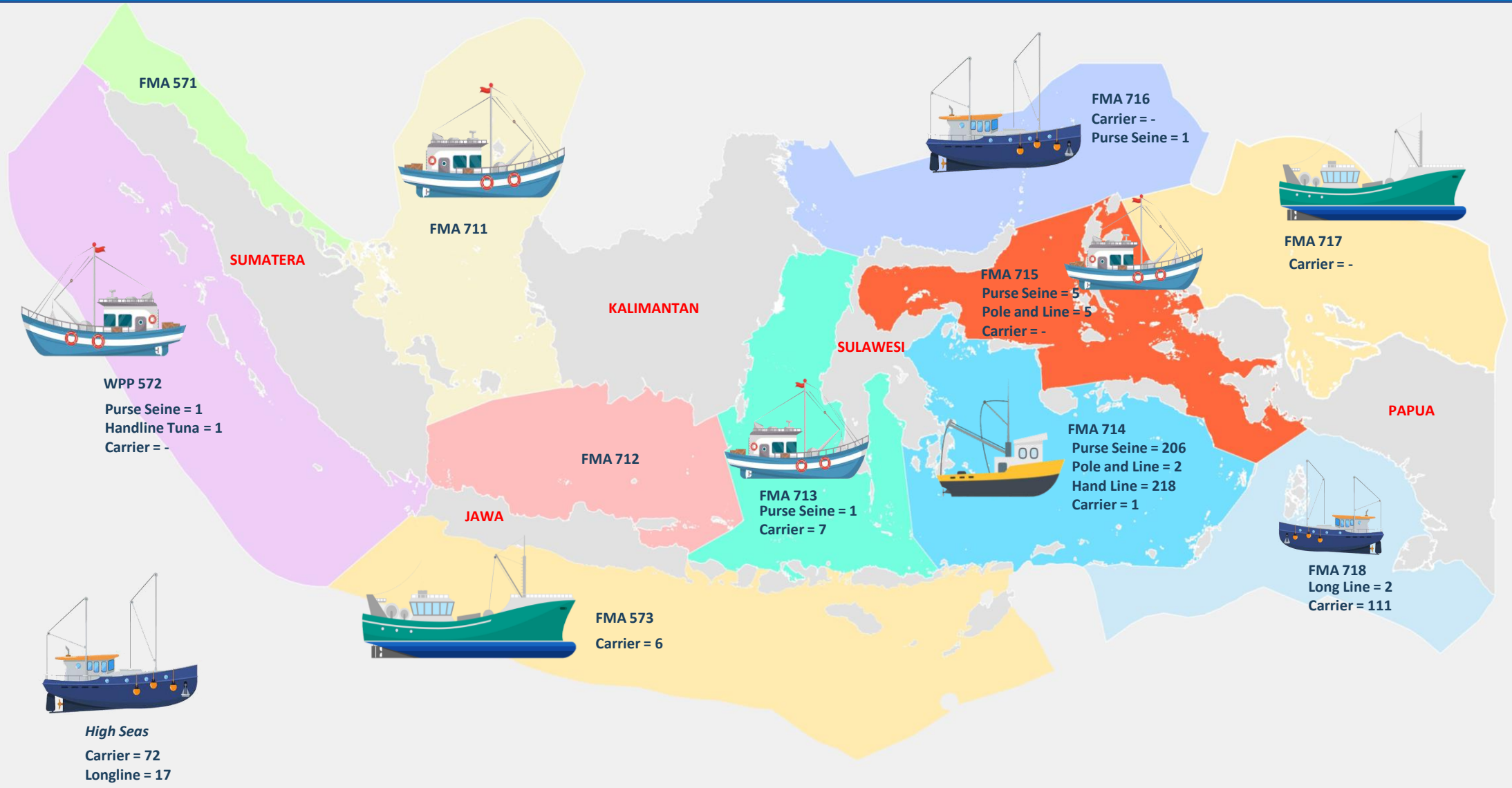
Progress Observer on board 2012-2022

WPP	Number of Vessels										
	2012	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**
WPP 571	-	1	-	-	-	9	5	9	1	-	-
WPP 572	-	1	9	-	11	24	23	20	10	8	3
WPP 573	8	2	8		24	35	79	57	21	5	6
WPP 711	-	5	-	-	-	10	3	5	-	1	-
WPP 712	-	-	-	-	1	5	10	37	4	-	-
WPP 713	-	-	-	-	-	1	6	12	8	1	9
WPP 714	-	-	-	-	20	41	70	57	15	61	428
WPP 715	-	3	6	10	51	27	52	94	218	44	10
WPP 716	-	4	3	-	6	27	6	30	13	18	1
WPP 717	-	8	8	-	6	1	-	13	4	6	-
WPP 718	-	1	10	-	7	1	-	8	21	2	113
High Seas	1	-	6	-	11	-	-	1	-	14	89
Total	**9**	**25**	**50**	**10**	**137**	**161**	**254**	**343**	**315**	**160**	**705**

Deployment *Observer on Board* (2021)



Deployment *Observer on Board* (2022)



Operational data Hand line, Pole and Line and Purse Seine in FMA 713-717 (2021)

FMA	Gear Code/ Range GT	Vessel	Trip	Setting
714-715	HL	7	8	80
	<10GT	4	5	53
	10-30GT	2	2	23
	>30GT	1	1	4
	PL	29	41	526
	10-30GT	12	17	325
	>30GT	17	24	201
716	PL	1	1	14
	>30GT	1	1	14

FMA	Gear Code	Range GT	Vessel	Trip	Setting
713	PS	10-30GT	1	1	6
714	PS	10-30GT	33	116	528
715	PS	10-30GT	1	1	2
		>30GT	7	8	129
716	PS	>30GT	7	7	45
717	PS	>30GT	2	2	21

Catch data Hand line, Pole and Line and Purse Seine in FMA 713-717 (2021)

FMA	Gear Code/ Range GT		BET	SKJ	YFT	Grand Total
714			1.87	111.32	19.33	132.52
	HL		0.03	0.48	0.44	0.95
		10-30GT	0.03	0.48	0.44	0.95
	PL		1.84	110.85	18.89	131.57
		10-30GT	1.57	95.40	16.50	113.47
		>30GT	0.27	15.45	2.39	18.10
715			0.40	159.66	37.71	197.77
	PL		0.40	159.66	37.71	197.77
		<10GT		0.02	0.18	0.19
		10-30GT		0.00	0.00	0.00
		>30GT	0.40	159.64	37.53	197.57
716				4.00	0.50	4.50
	PL			4.00	0.50	4.50
		>30GT		4.00	0.50	4.50

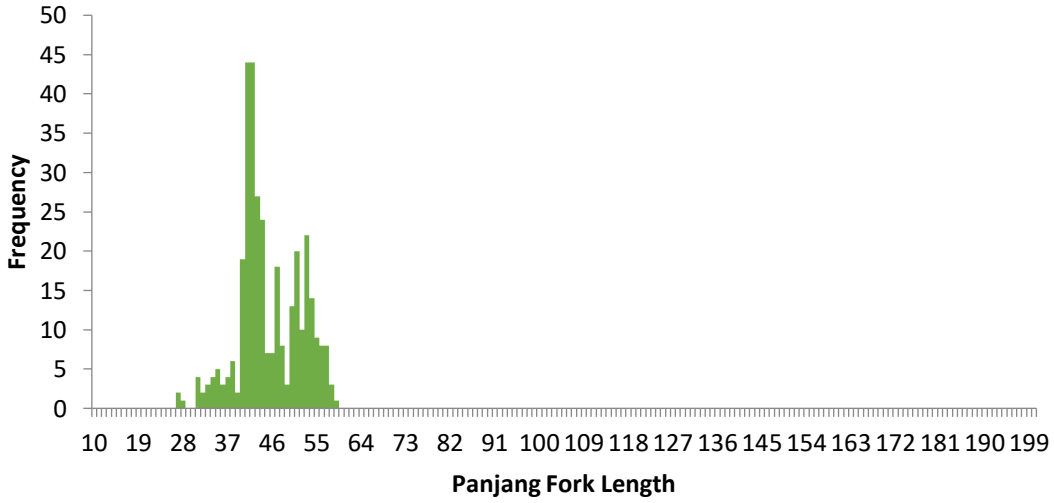
FMA	Gear Code/ Range GT	BET	SKJ	YFT
714		1.4%	84.0%	14.6%
	HL	3.0%	50.3%	46.7%
	10-30GT	3.0%	50.3%	46.7%
	PL	1.4%	84.2%	14.4%
	10-30GT	1.4%	84.1%	14.5%
	>30GT	1.5%	85.3%	13.2%
715		0.2%	80.7%	19.1%
	PL	0.2%	80.7%	19.1%
	<10GT	0.0%	8.8%	91.2%
	>30GT	0.2%	80.8%	19.0%
716		0.0%	88.9%	11.1%
	PL	0.0%	88.9%	11.1%
	>30GT	0.0%	88.9%	11.1%

FMA	gear Code	Range GT	BET	SKJ	YFT	sum
713	PS	10-30GT		1.02	0.21	1.23
714	PS	10-30GT	0.92	88.65	37.52	127.10
715	PS	>30GT	5.22	293.69	170.09	469.01
716	PS	>30GT	0.45	81.9	41.15	123.50
717	PS	>30GT	0.95	169.05	48.42	218.42

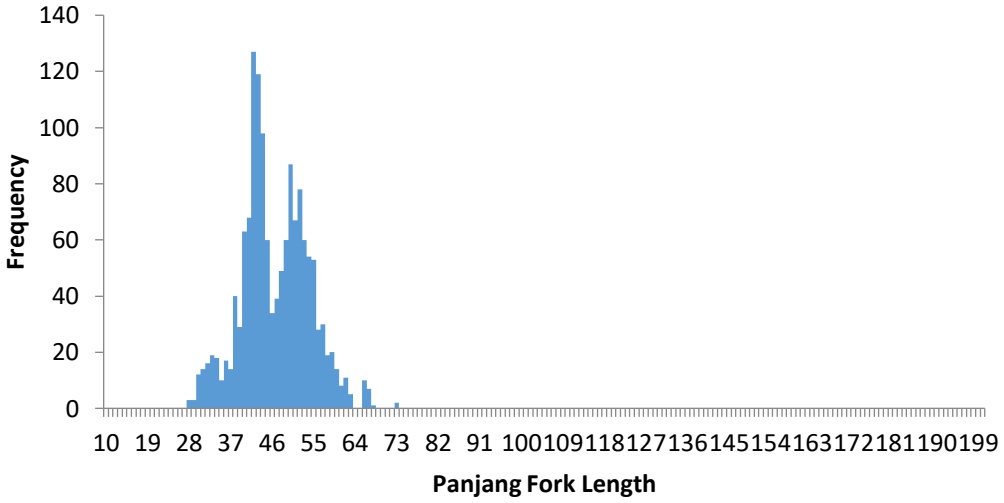
FMA	gear Code	Range GT	BET	SKJ	YFT
713	PS	10-30GT		82.9%	17.1%
714	PS	10-30GT	0.7%	69.7%	29.5%
715	PS	>30GT	1.1%	62.6%	36.3%
716	PS	>30GT	0.4%	66.3%	33.3%
717	PS	>30GT	0.4%	77.4%	22.2%

SIZE FREQUENCY DATA PL 2021

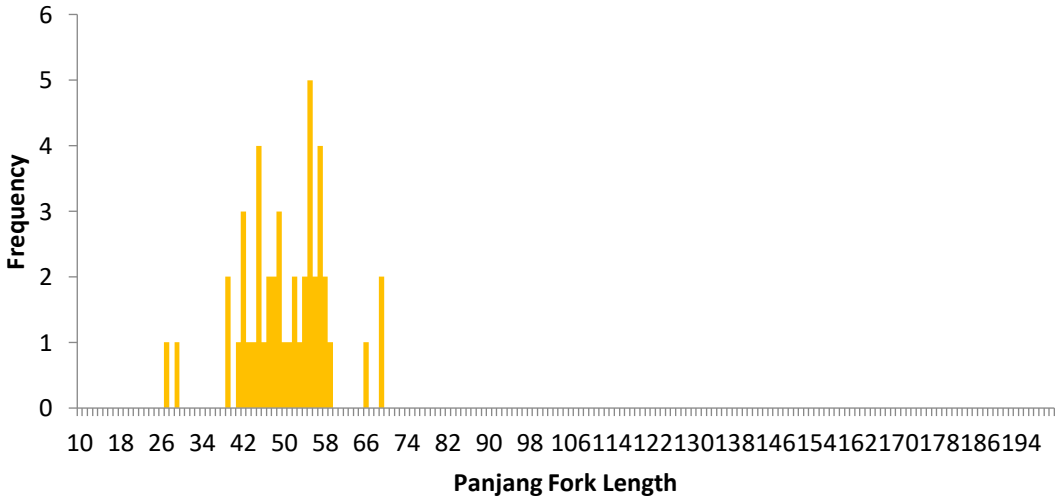
Madidihang



Cakalang

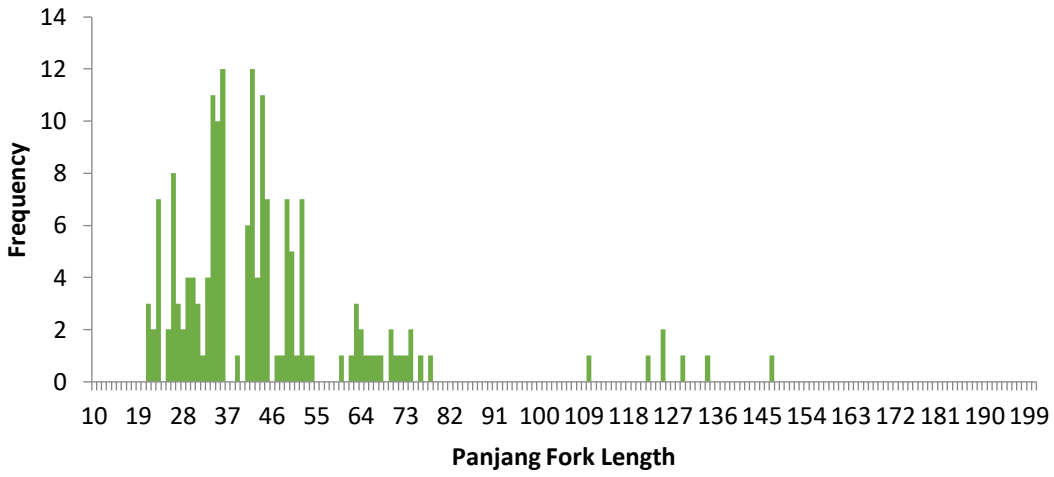


Mata Besar

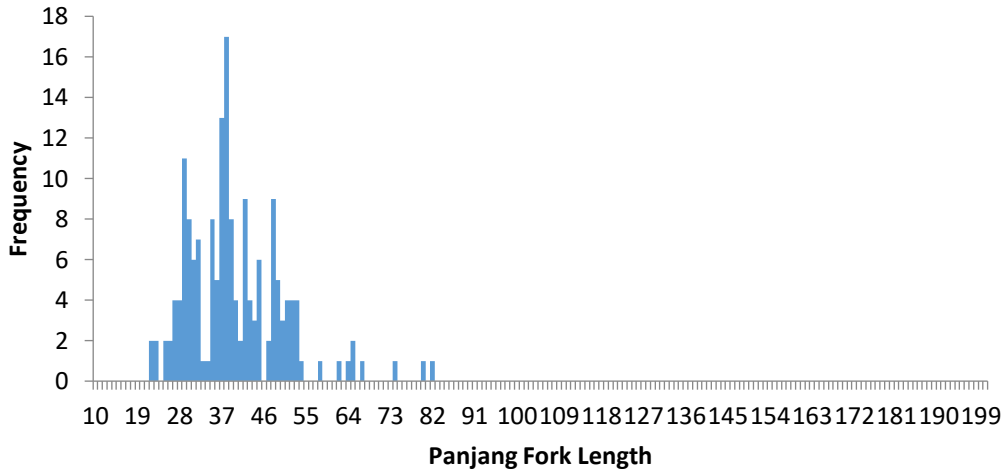


SIZE FREQUENCY DATA HL 2021

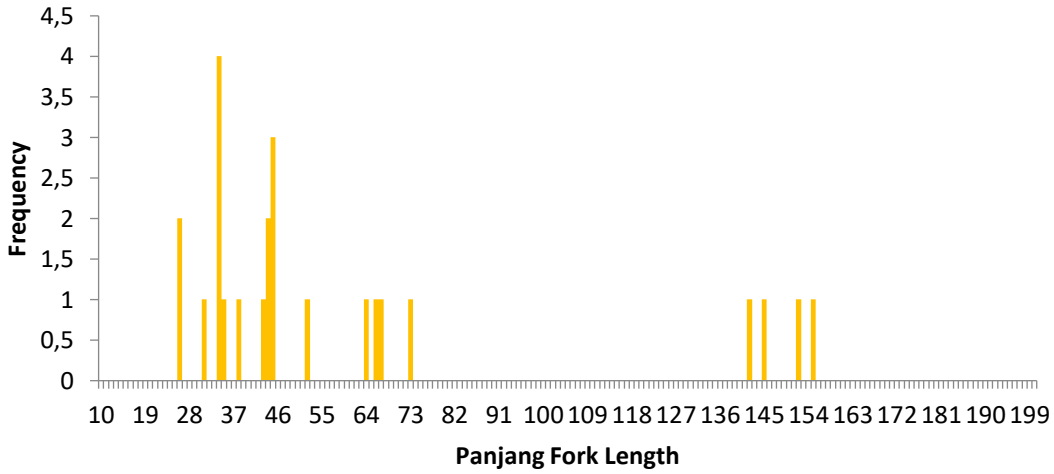
Madidihang



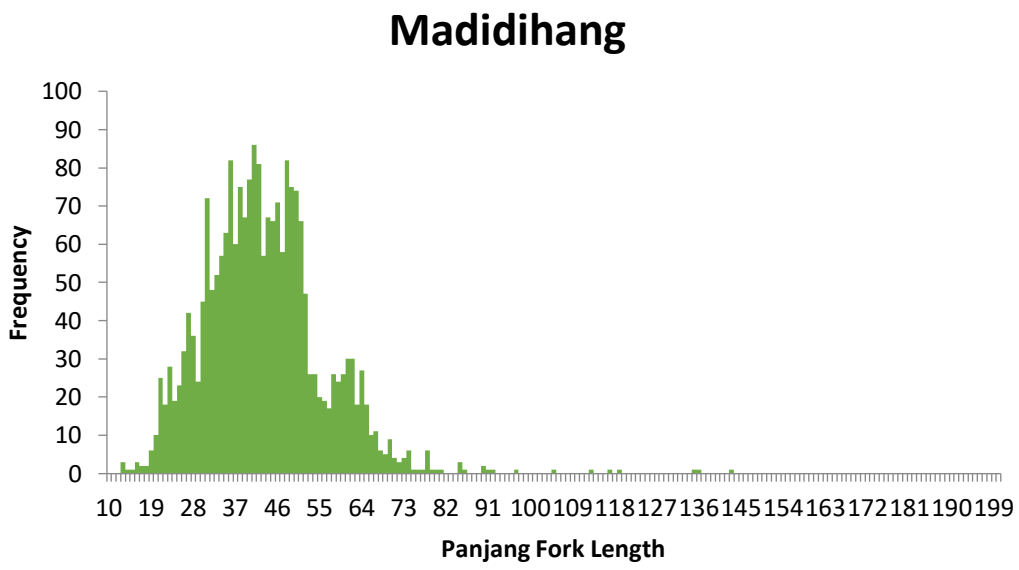
Cakalang

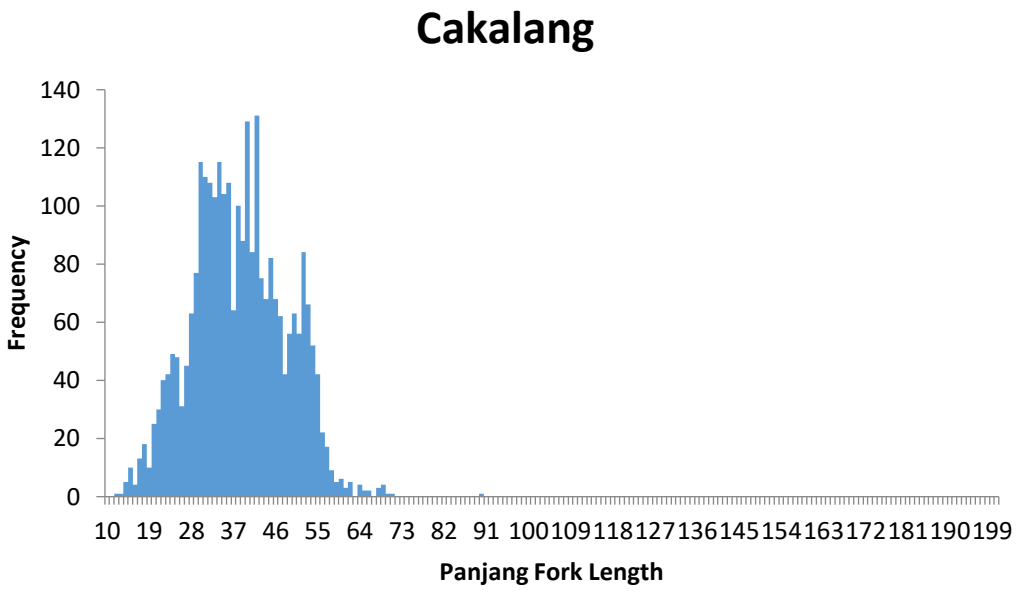


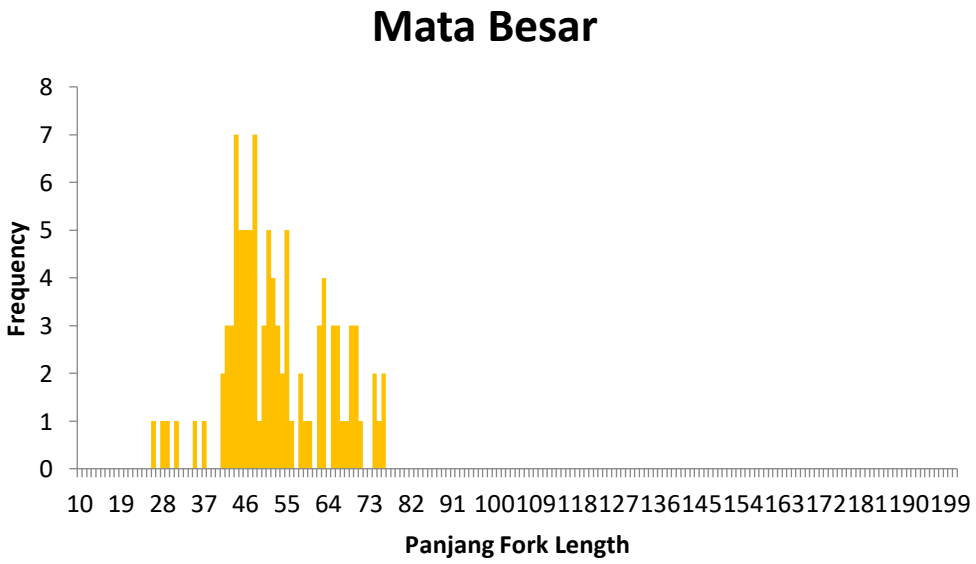
Mata Besar



SIZE FREQUENCY DATA PS 2021







Thank You

WPEA Data Collection

The 14th Indonesian Annual Tuna Fisheries Catch Estimates Review Workshop

Bogor, 30-31 Mei 2023

INTRODUCTION

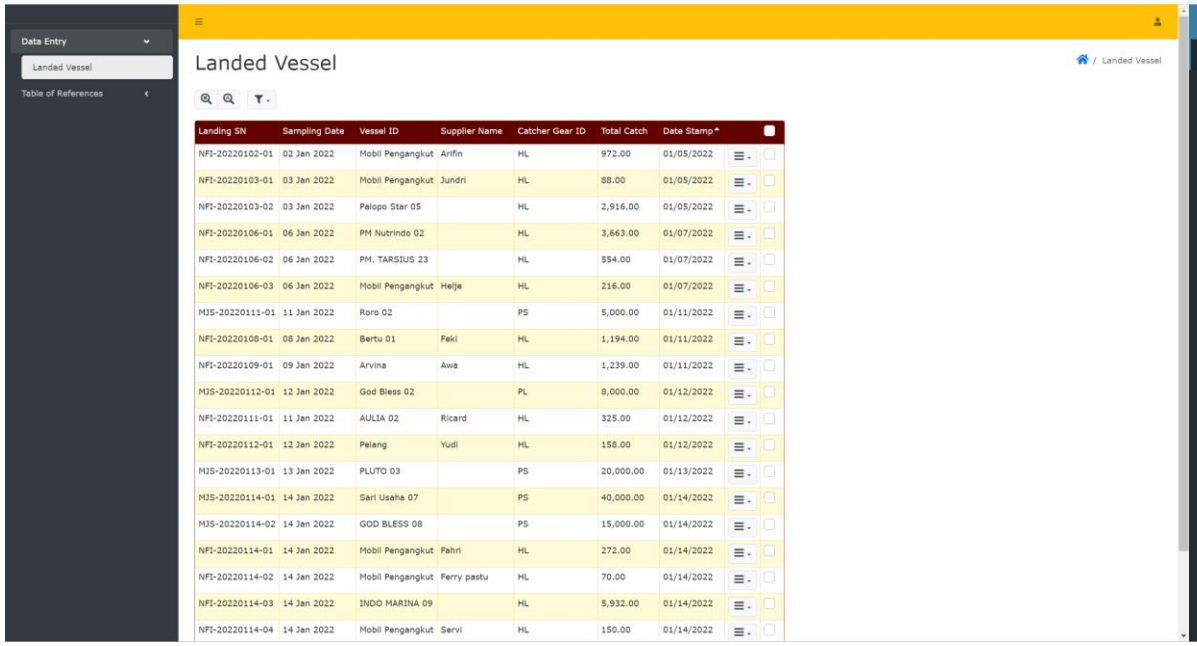
WPEA Projects:

1. OFM (Oceanic Fisheries Management) (2010 – 2015)
2. SM (Sustainable Management) (2015 – 2019)
3. ITM (Improved Tuna Monitoring) (2019 – 2022)

Sampling Locations

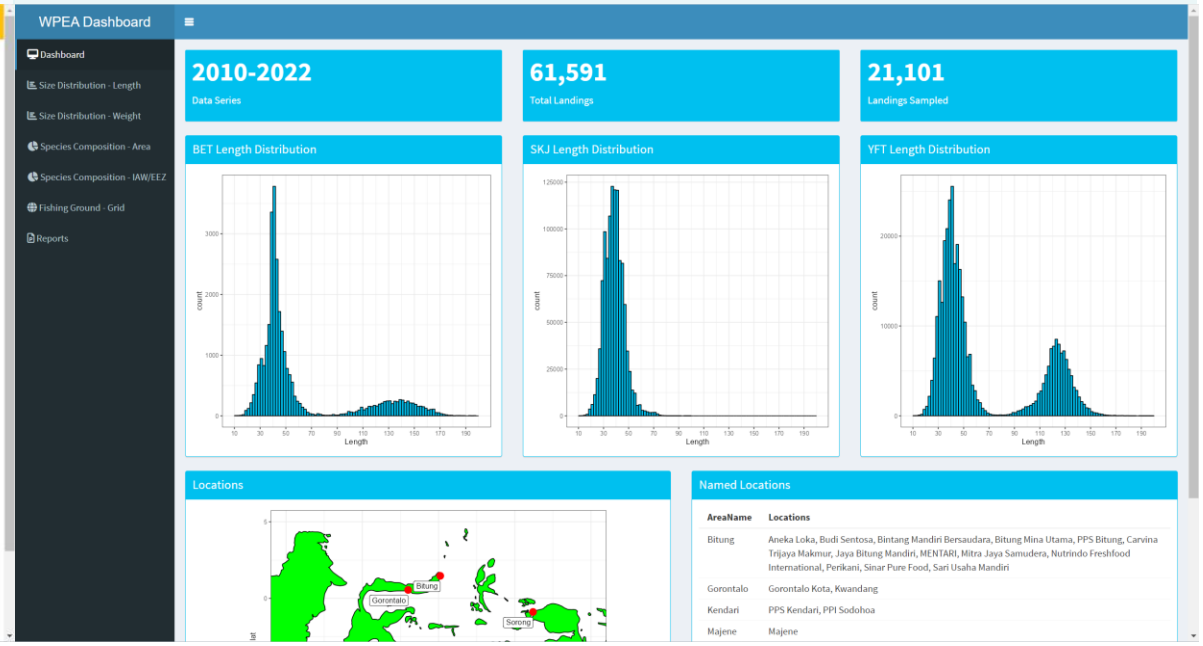
Indonesia WPEA Database System

Data Entry



Landing SN	Sampling Date	Vessel ID	Supplier Name	Catcher Gear ID	Total Catch	Date Stamp
NFI-20220102-01	02 Jan 2022	Mobil Pengangkut	Arifin	HL	972.00	01/05/2022
NFI-20220103-01	03 Jan 2022	Mobil Pengangkut	Jundri	HL	88.00	01/05/2022
NFI-20220103-02	03 Jan 2022	Palopo Star 05		HL	2,916.00	01/05/2022
NFI-20220106-01	06 Jan 2022	PM Nutrindo 02		HL	3,663.00	01/07/2022
NFI-20220106-02	06 Jan 2022	PM. TARSIUS 23		HL	554.00	01/07/2022
NFI-20220106-03	06 Jan 2022	Mobil Pengangkut	Helje	HL	216.00	01/07/2022
MJS-20220111-01	11 Jan 2022	Roro 02		PS	5,000.00	01/11/2022
NFI-20220108-01	08 Jan 2022	Bertu 01	Feki	HL	1,194.00	01/11/2022
NFI-20220109-01	09 Jan 2022	Arvina	Awa	HL	1,239.00	01/11/2022
MJS-20220112-01	12 Jan 2022	God Bless 02		PL	8,000.00	01/12/2022
NFI-20220111-01	11 Jan 2022	AULIA 02	Ricard	HL	325.00	01/12/2022
NFI-20220112-01	12 Jan 2022	Pelang	Yudi	HL	158.00	01/12/2022
MJS-20220113-01	13 Jan 2022	PLUTO 03		PS	20,000.00	01/13/2022
MJS-20220114-01	14 Jan 2022	Sari Usaha 07		PS	40,000.00	01/14/2022
MJS-20220114-02	14 Jan 2022	GOD BLESS 08		PS	15,000.00	01/14/2022
NFI-20220114-01	14 Jan 2022	Mobil Pengangkut	Fahri	HL	272.00	01/14/2022
NFI-20220114-02	14 Jan 2022	Mobil Pengangkut	Ferry pastu	HL	70.00	01/14/2022
NFI-20220114-03	14 Jan 2022	INDO MARINA 09		HL	5,932.00	01/14/2022
NFI-20220114-04	14 Jan 2022	Mobil Pengangkut	Servi	HL	150.00	01/14/2022

Summary Dashboard



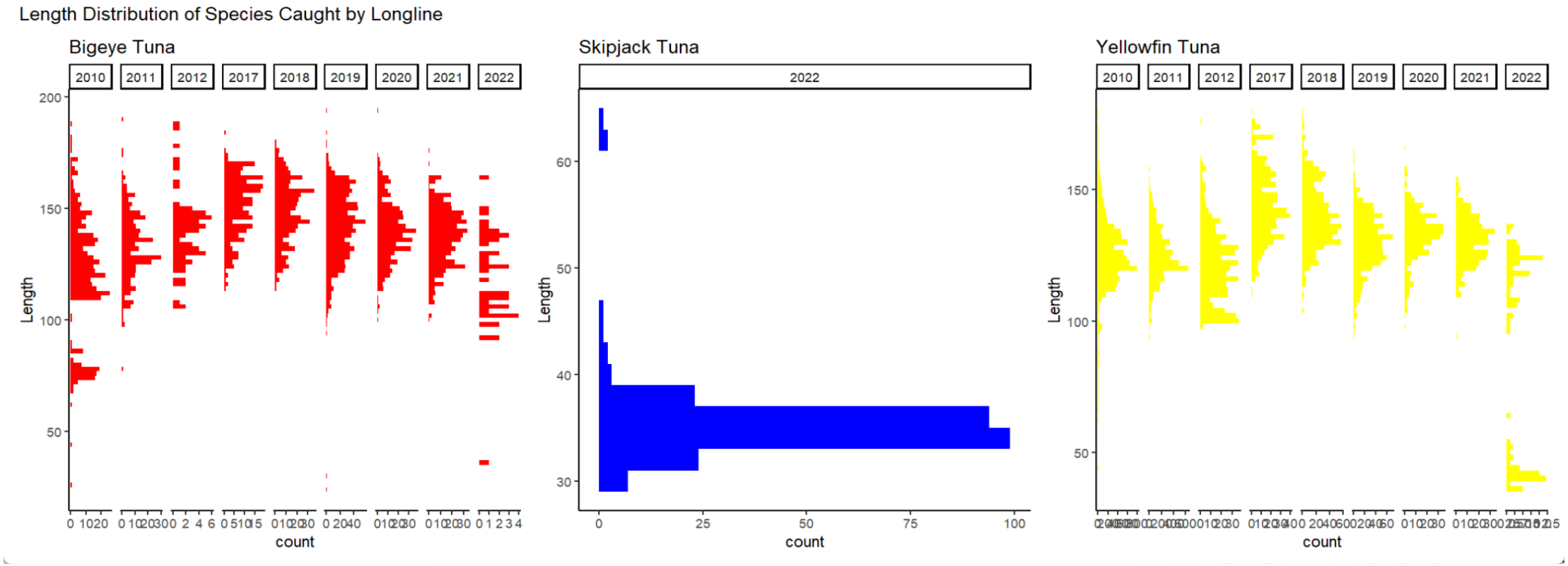
2022 Species Composition

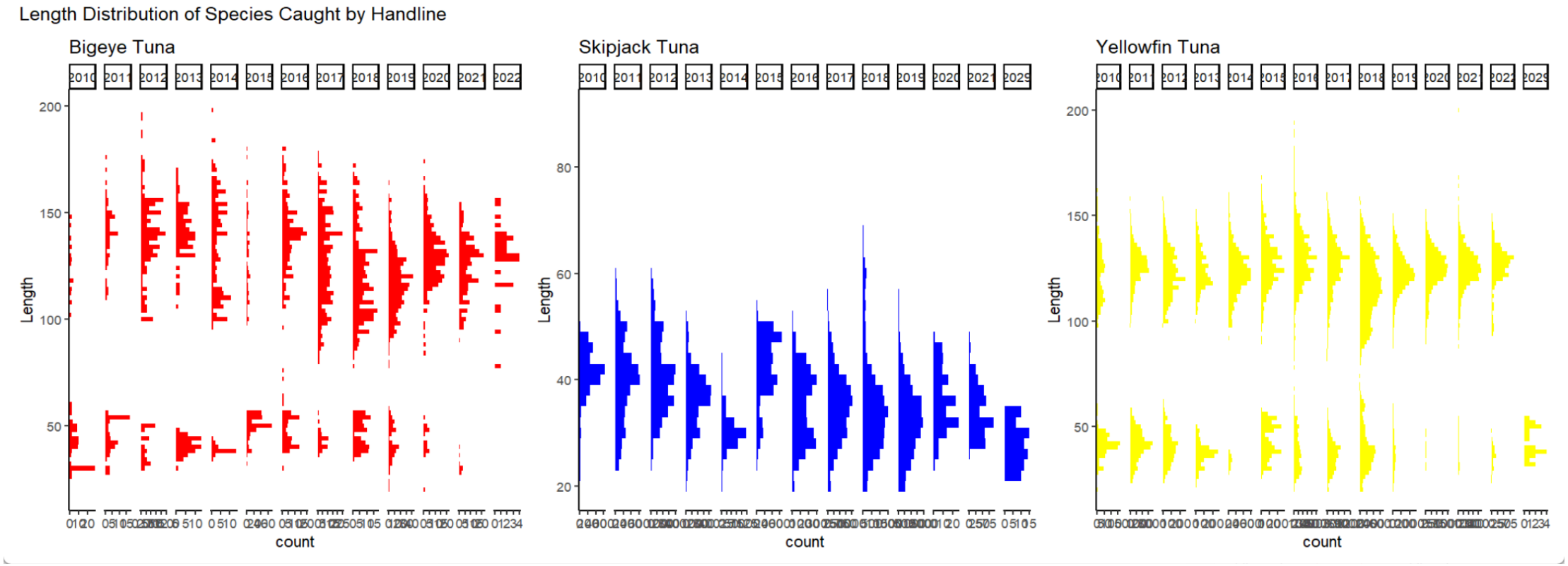
Areas	Gears	SKJ	YFT	BET	ALB
EEZ	HL	-	97.74	2.12	0.15
IAW	HL	-	95.69	4.28	0.03
EEZ	LL	3.11	42.75	54.14	-
IAW	LL	-	30.12	69.88	-
EEZ	PL	88.26	8.50	3.23	-
IAW	PL	91.83	7.68	0.49	-
EEZ	PS	81.08	15.60	3.32	-
IAW	PS	77.14	21.49	1.37	-

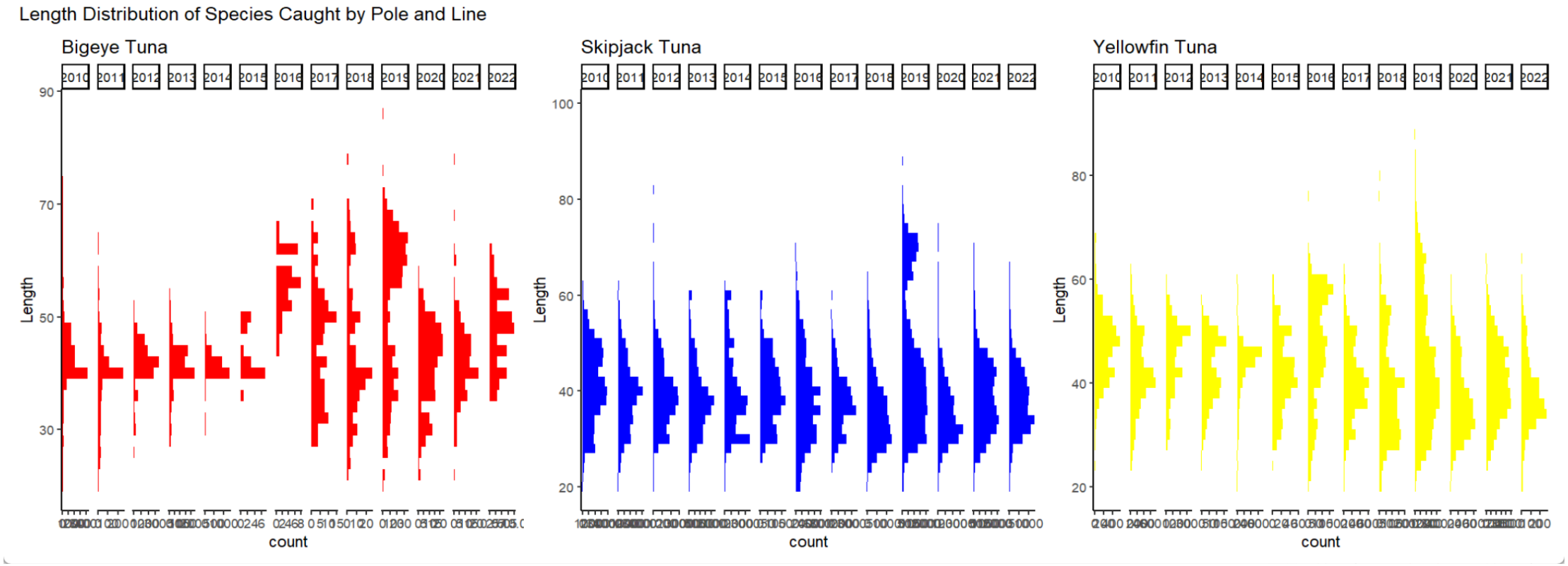
**Data from Jan to Jun*

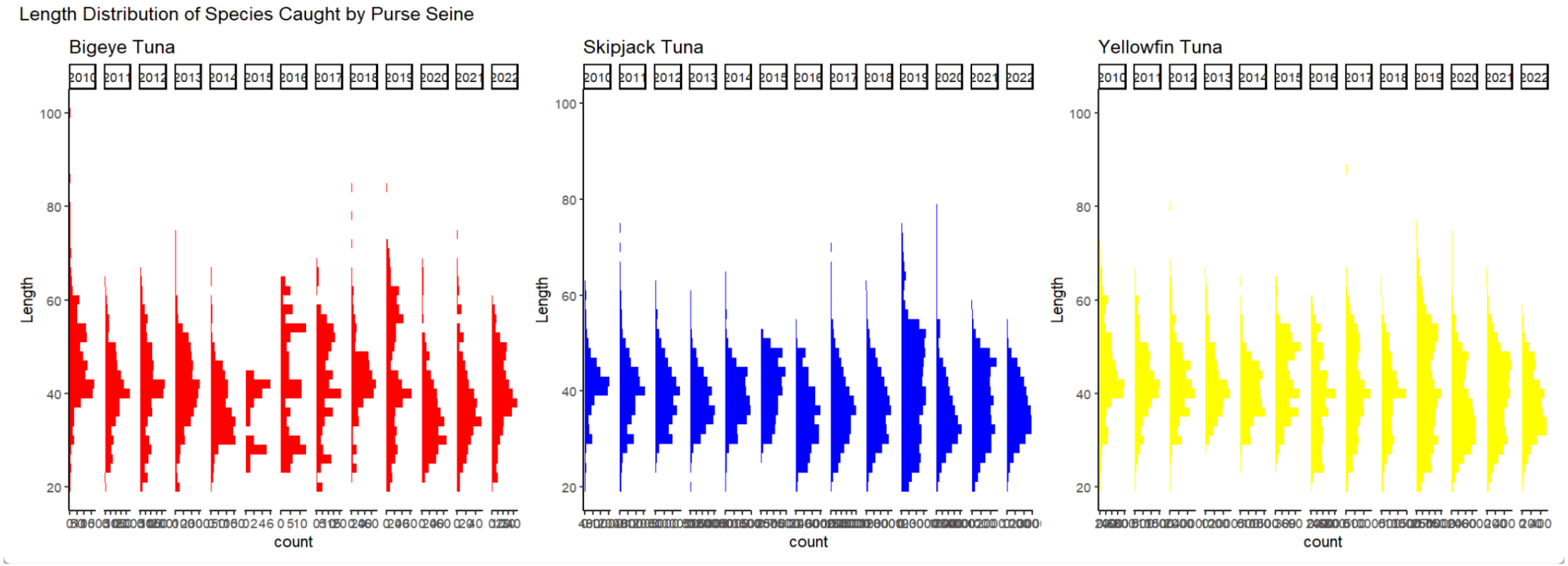
History of Length Distribution

2010 - 2022


Length Distribution of Species Caught by Longline
Bigeye Tuna
2010
2011
2012
2017
2018
2019
2020
2021
2022
Length
count
Skipjack Tuna
2022
Length
count
Yellowfin Tuna
2010
2011
2012
2017
2018
2019
2020
2021
2022
Length
count

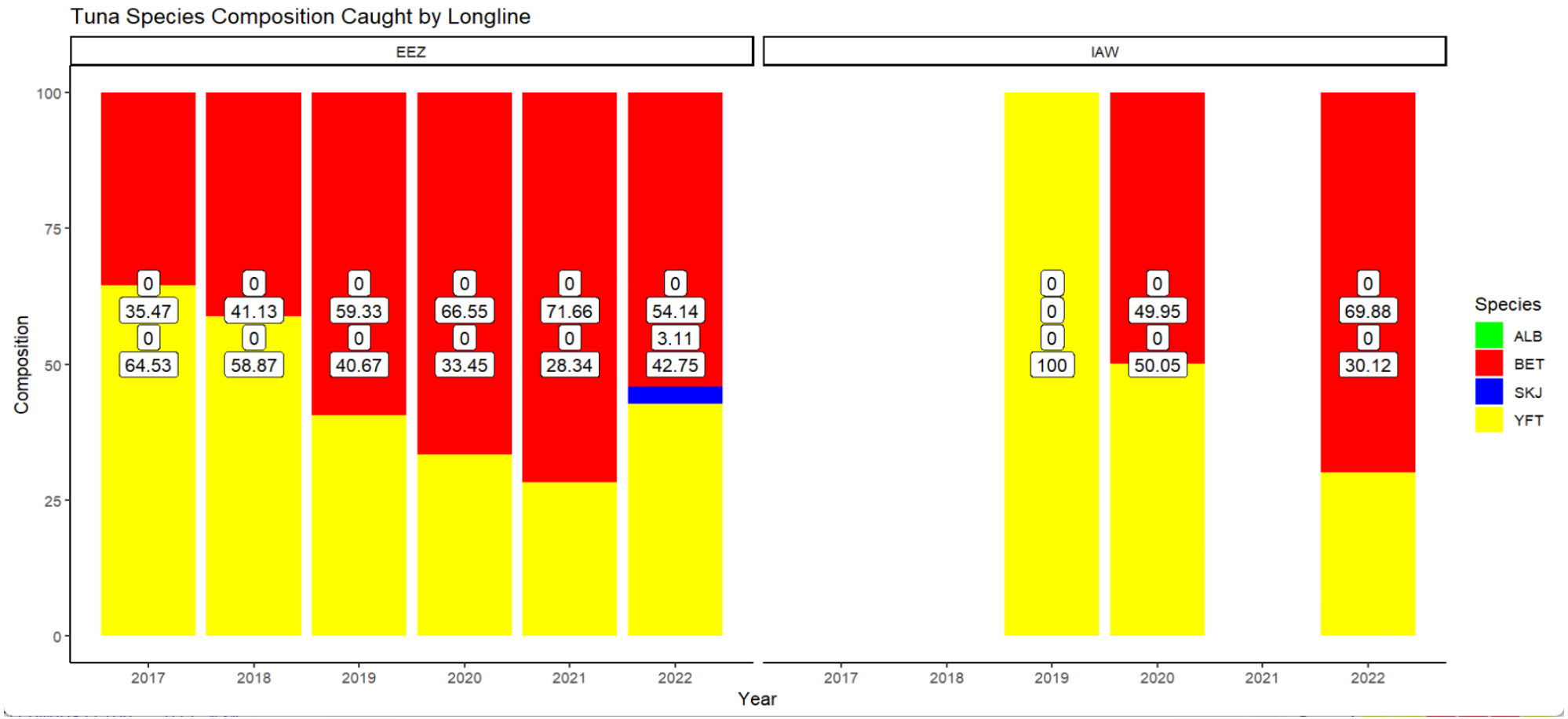

Length Distribution of Species Caught by Handline
Bigeye Tuna
Skipjack Tuna
Yellowfin Tuna
Length
count

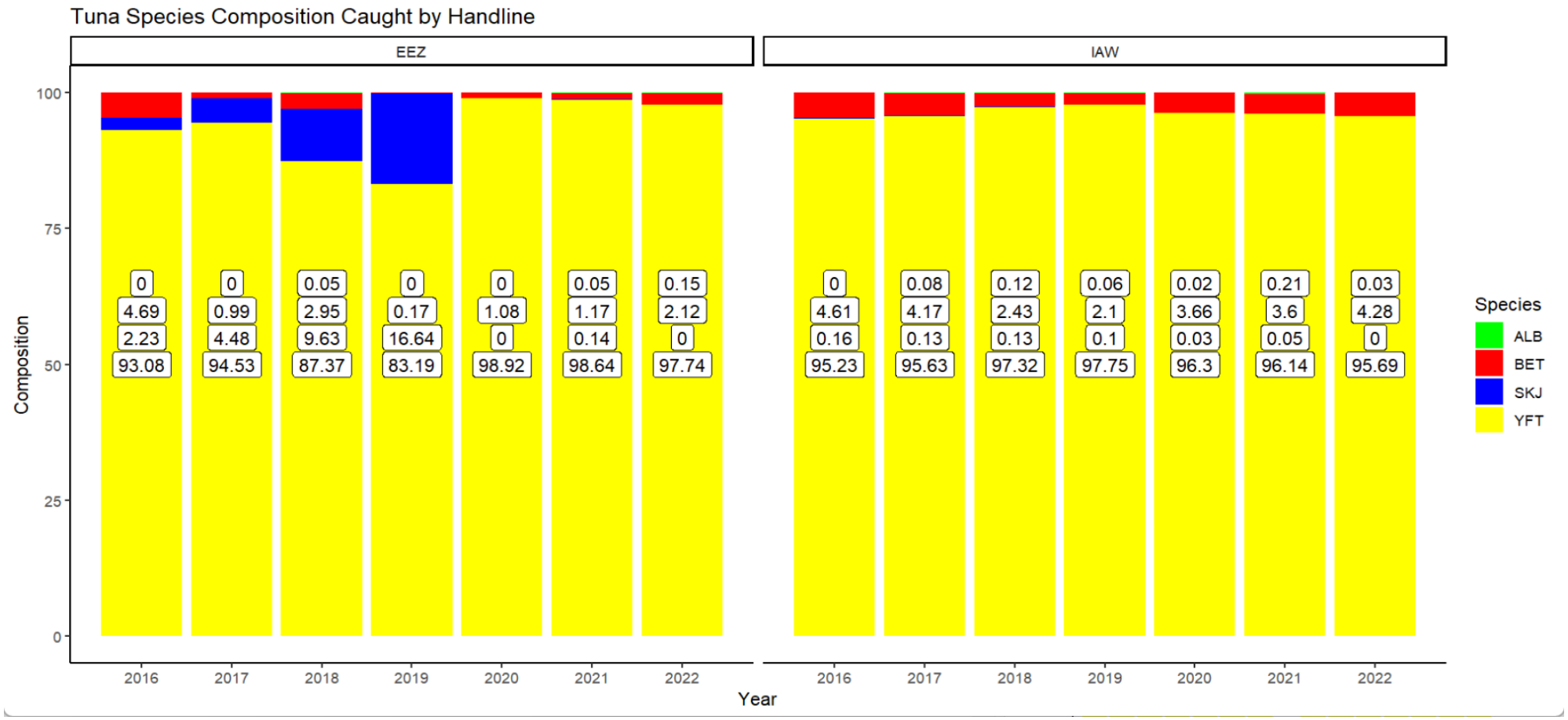

Length Distribution of Species Caught by Pole and Line
Bigeye Tuna
Skipjack Tuna
Yellowfin Tuna
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
Length
count


Length Distribution of Species Caught by Purse Seine
Bigeye Tuna
Skipjack Tuna
Yellowfin Tuna
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
Length
100
80
60
40
20
count

History of Species Composition

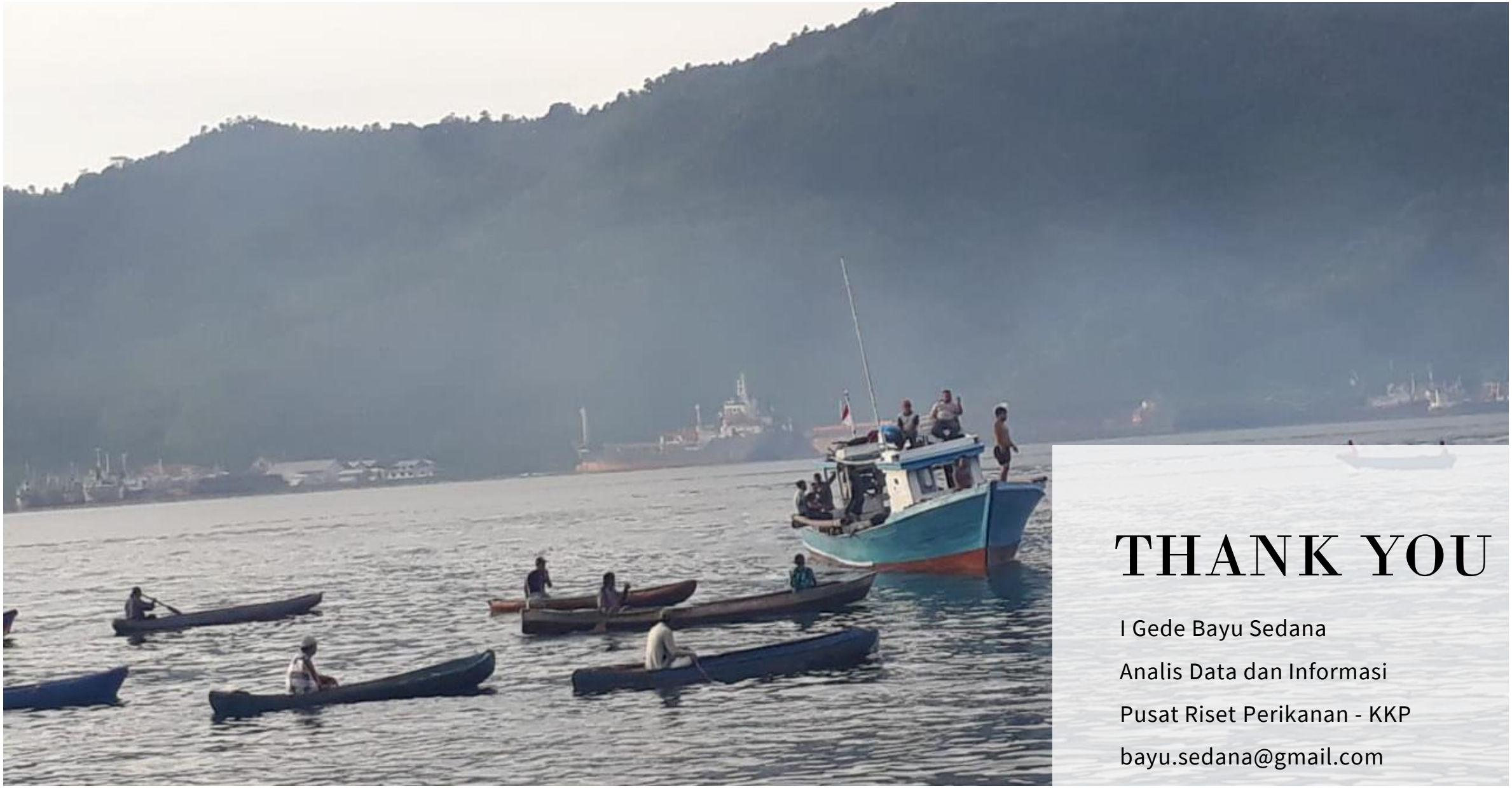
2010 - 2022


Tuna Species Composition Caught by Longline
EEZ
IAW
Composition
100
75
50
25
0
0
35.47
0
64.53
0
41.13
0
58.87
0
59.33
0
40.67
0
66.55
0
33.45
0
71.66
0
28.34
0
54.14
3.11
42.75
0
0
0
100
0
49.95
0
50.05
0
69.88
0
30.12
2017
2018
2019
2020
2021
2022
Year
Species
ALB
BET
SKJ
YFT


Tuna Species Composition Caught by Handline
EEZ
IAW
Composition
100
75
50
25
0
0
4.69
2.23
93.08
0
0.99
4.48
94.53
0.05
2.95
9.63
87.37
0
0.17
16.64
83.19
0
1.08
0
98.92
0.05
1.17
0.14
98.64
0.15
2.12
0
97.74
0
4.61
0.16
95.23
0.08
4.17
0.13
95.63
0.12
2.43
0.13
97.32
0.06
2.1
0.1
97.75
0.02
3.66
0.03
96.3
0.21
3.6
0.05
96.14
0.03
4.28
0
95.69
2016
2017
2018
2019
2020
2021
2022
Year
Species
ALB
BET
SKJ
YFT


Tuna Species Composition Caught by Pole and Line
EEZ
IAW
Composition
100
75
50
25
0
0
0.65
83.7
15.64
0
2.8
81.1
16.1
0
1.41
81.52
17.08
0
0.84
84.35
14.8
0
0.62
89.37
10.01
0
3.23
88.26
8.5
0
0
85.54
14.46
0.01
1.4
81.84
16.75
0
4.35
75.26
20.39
0
2.05
81.6
16.35
0
1.81
74.38
23.81
0
0.93
77.23
21.84
0
0.49
91.83
7.68
2016
2017
2018
2019
2020
2021
2022
Year
Species
ALB
BET
SKJ
YFT


Tuna Species Composition Caught by Purse Seine
EEZ
IAW
Composition
100
75
50
25
0
0
0.11
82.24
17.65
0
0.18
69.87
29.95
0
3.41
71.07
25.52
0
1.75
76.49
21.77
0
1.91
74.77
23.32
0
1.21
75.83
22.96
0
3.32
81.08
15.6
0
0.51
83.54
15.95
0
1.17
59.57
39.26
0
1.5
69.24
29.26
0
1.8
66.94
31.26
0
2.56
77.32
20.12
0
2.26
75.82
21.92
0
1.37
77.14
21.49
2016
2017
2018
2019
2020
2021
2022
Year
Species
ALB
BET
SKJ
YFT



THANK YOU

I Gede Bayu Sedana

Analis Data dan Informasi

Pusat Riset Perikanan - KKP

bayu.sedana@gmail.com

Potential Catch and Effort Data

The 14th Indonesian Annual Tuna Fisheries Catch Estimates Review Workshop

30 - 31 May 2023

Lilis Sadiyah,
I Gede Bayu Sedana,
Fayakun Satria

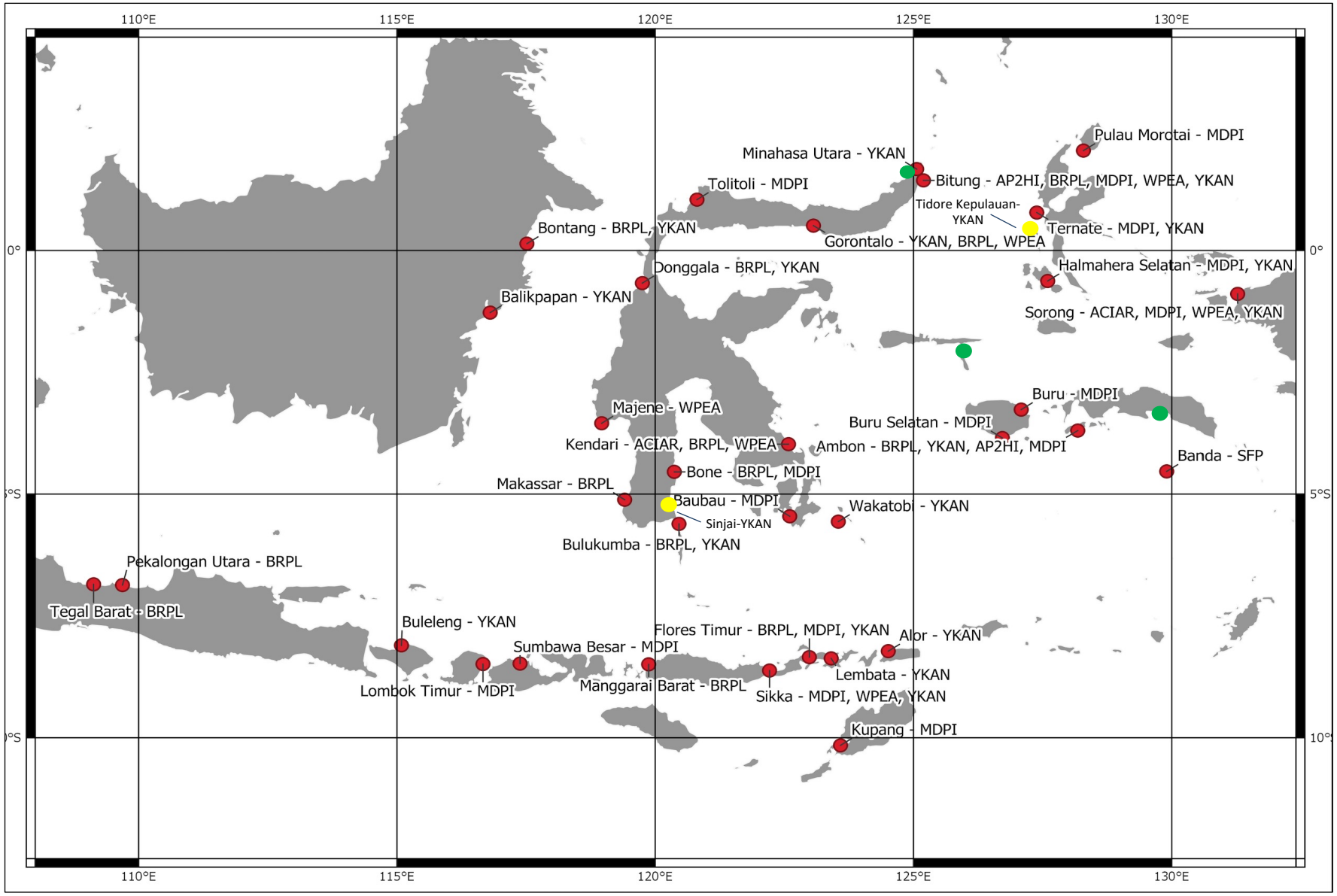
Pusat Riset Perikanan
Organisasi Riset Kebumian dan Maritim
Badan Riset dan Inovasi Nasional

BRIN
BADAN RISET
DAN INOVASI NASIONAL

Data Summary

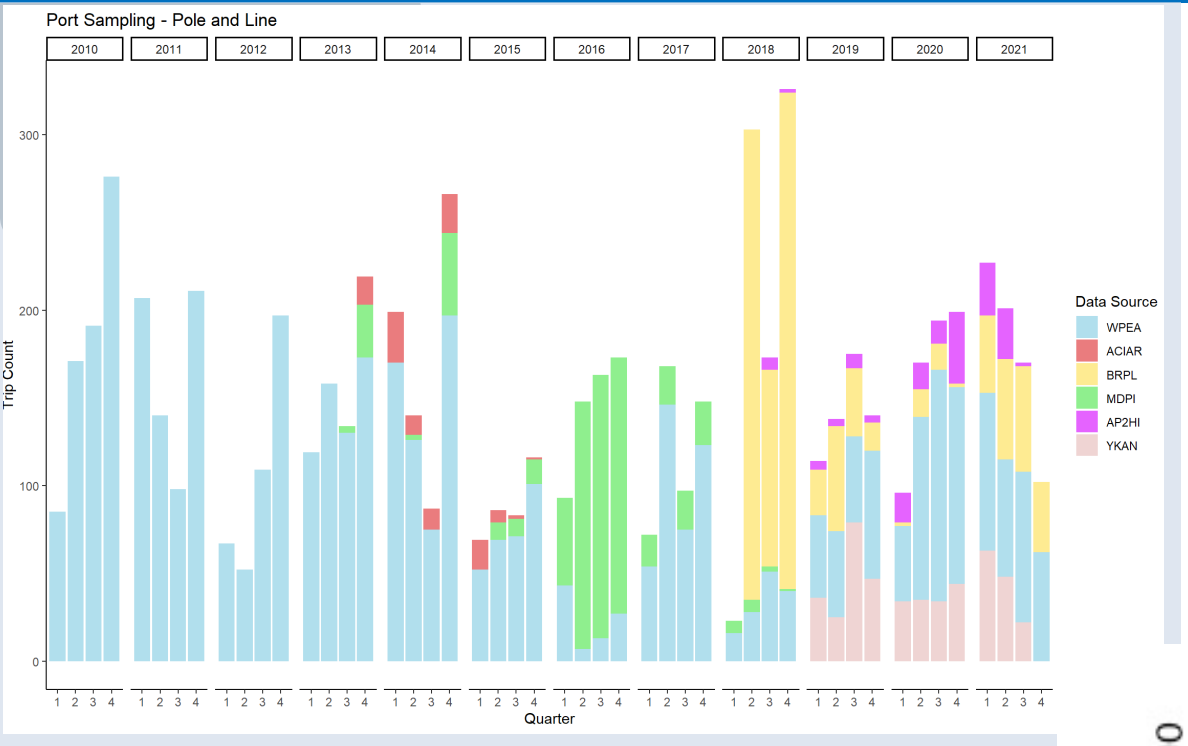
Data series name/source	Sampling period	Sampling freq.	FMA coverage	Fishing gear	Source of effort/catch data	Rel. abundance?	Size indices?	On-going?
Pusriskan - WPEA (Port Sampling)	2010 – 2021	Daily	713 - 715	LL, HL, PS, PL, GL, TL, TLH	Effort(gt, days at sea, fishing days), Catch(per landing per species)	BET, SKY, YFT, OTH	√	√
Pusriskan - ACIAR (Port Sampling)	2013 – 2015	Daily	713 - 715	HL, PL	Effort (days at sea), Catch (per landing per species)	BET, SKY, YFT, OTH	√	X
BRPL (Port Sampling)	2018 – 2021	Daily	713 - 715	PS, TL, HL, PL, LL	Effort(days at sea, fishing days, setting per trip, hooks), Catch(per landing per species)	BET, SKY, YFT, OTH	N/A	√
MDPI (Port Sampling)	2012 – 2021	Daily	713 - 715	HL, PL	Effort(gt, days at sea, fishing days), Catch(per landing per species)	BET, SKY, YFT, OTH	√	√
AP2HI (Port Sampling)	2018 – 2021	Daily	713 - 715	HL, PL	Effort(gt, days at sea, fishing days), Catch(per landing per species)	BET, SKY, YFT, OTH	√	√
SFP (Port Sampling)	2015 – 2021	Daily	713 - 715	HL	Effort(gt, days at sea, fishing days), Catch(per landing per species)	BET, SKY, YFT, OTH	√	√
YKAN (Port Sampling)	2019 – 2021	Daily	713 - 715	PL, HL, TL, PS, GL	Effort(gt, days at sea, fishing days, setting per trip), Catch(per landing per species)	BET, SKY, YFT, OTH	√	√
DJPT (Observer)	2016 – 2021	Setting	713 - 715	HL, PS, PL, LL, TL	Effort(gt, fishing days, hooks), Catch(per setting per species)	BET, SKY, YFT, OTH	√	√
MDPI (Observer)	2019 – 2021	Setting	713 - 715	TL, HL	Effort(gt, fishing days), Catch(per setting per species)	BET, SKY, YFT, OTH	√	√
AP2HI (Observer)	2017 – 2021	Setting	713 - 715	PL	Effort(gt, fishing days, hooks), Catch(per setting per species)	BET, SKY, YFT, OTH	√	√
DJPT (Logbook)	2015 – 2021	Setting	713 - 715	PS, PL, HL, TL, LL	Effort(gt, fishing days, hooks), Catch(per setting per species)	BET, SKY, YFT, OTH	√	√
YKAN (Logbook/CODRS)	2019 – 2021	Setting	713-715	LL	Effort(gt, fishing days, hooks), Catch(per setting per species)	BET, SKY, YFT, OTH	√	√

Sampling sites



1. Pole and Line - SKJ

1.1. PL - Port Sampling

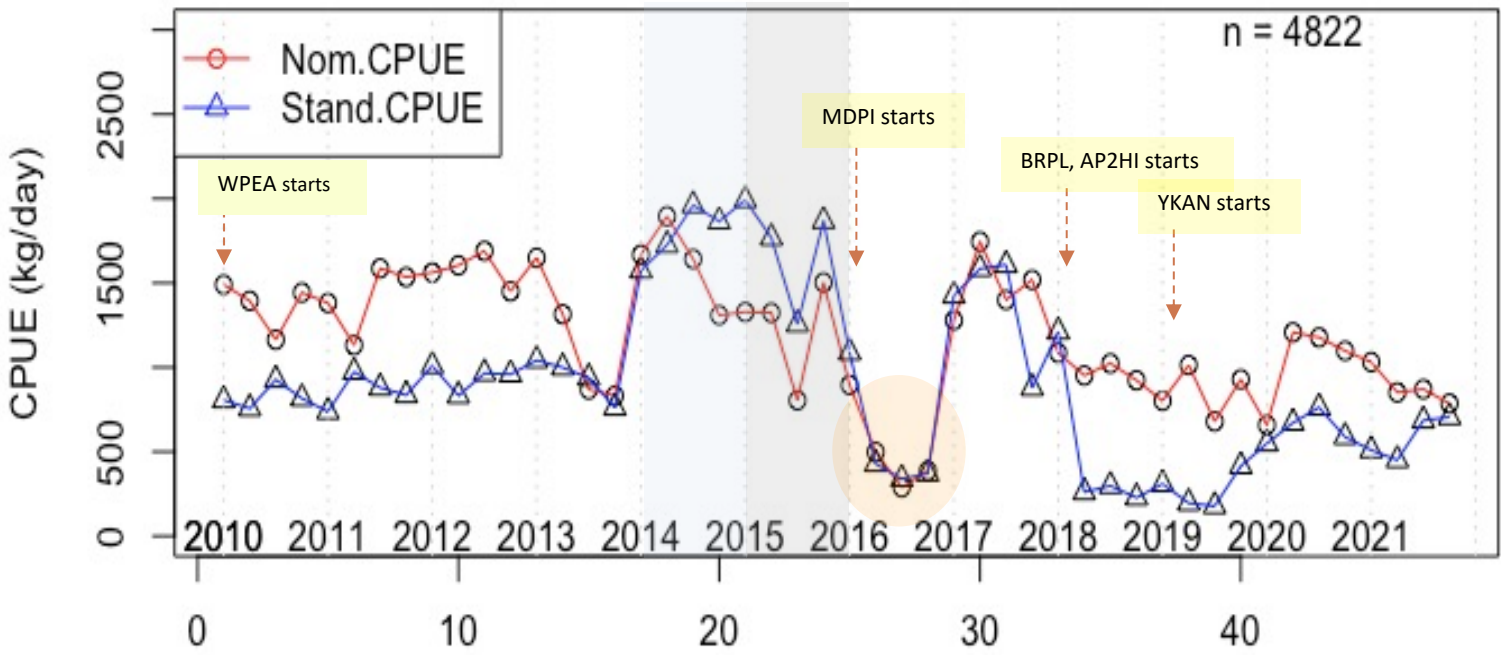


Assumptions:

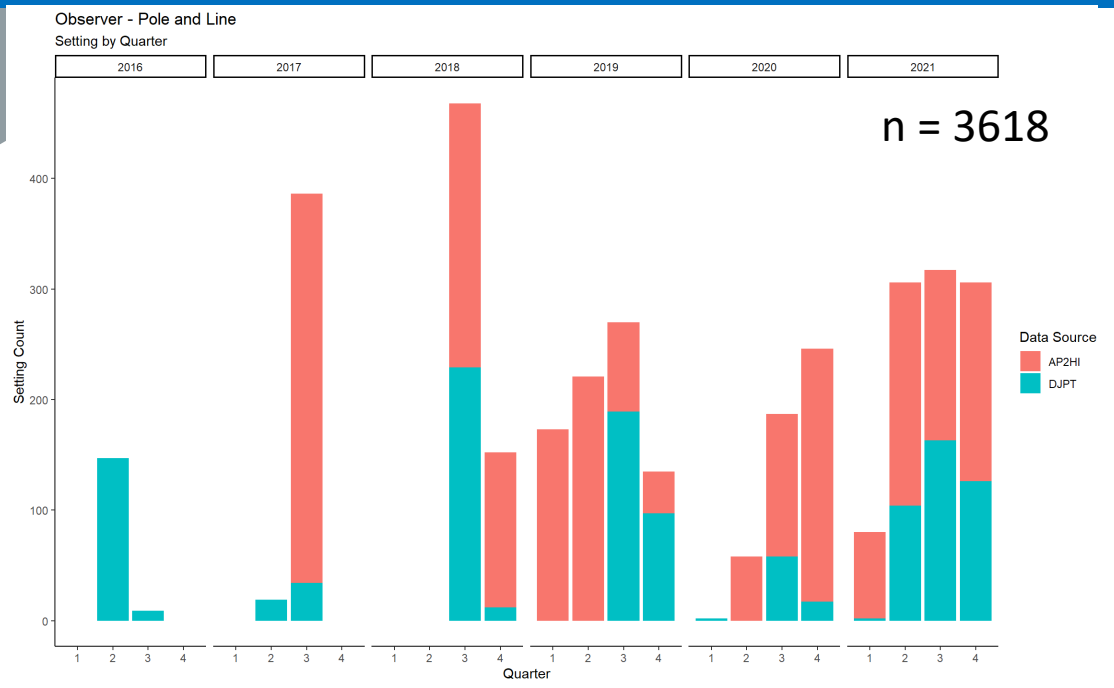
1. Max catch per day ~ 3,000 kg
2. Max catch per trip ~ 90,000 kg
3. Min SKJ catch per trip ~ 5 kg

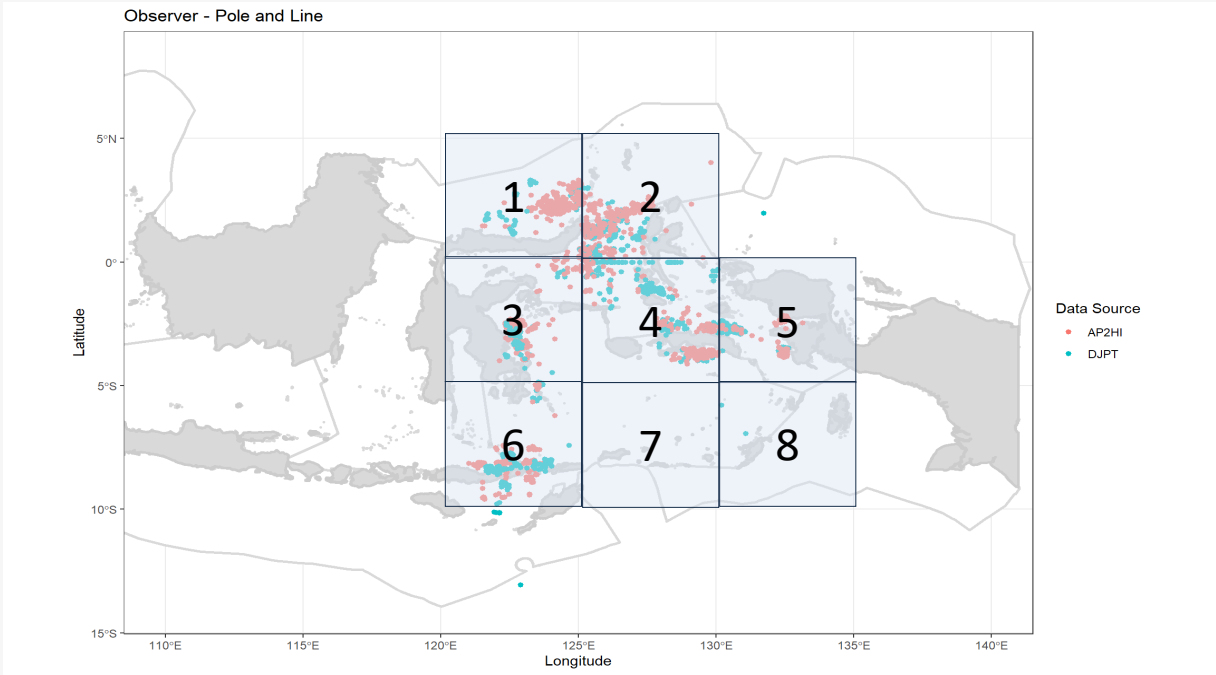
Formula:
SKJ catch ~year + month + landing site + vessel_id

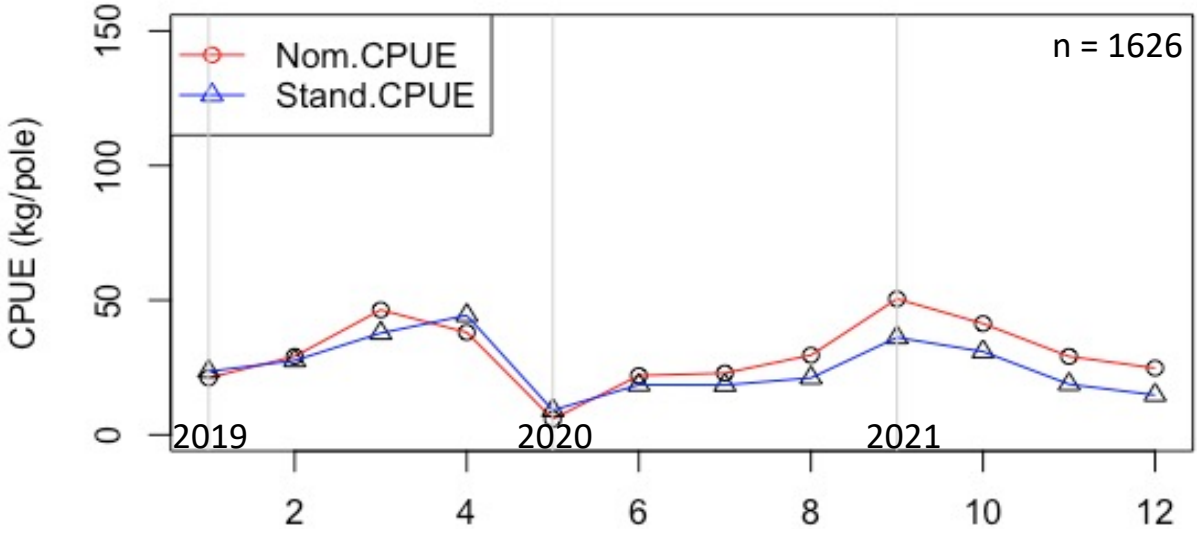
Deviance explained = 68.1%



1.2. PL – Observer







Formula:
SKJ catch ~ year + month + area + vessel_id

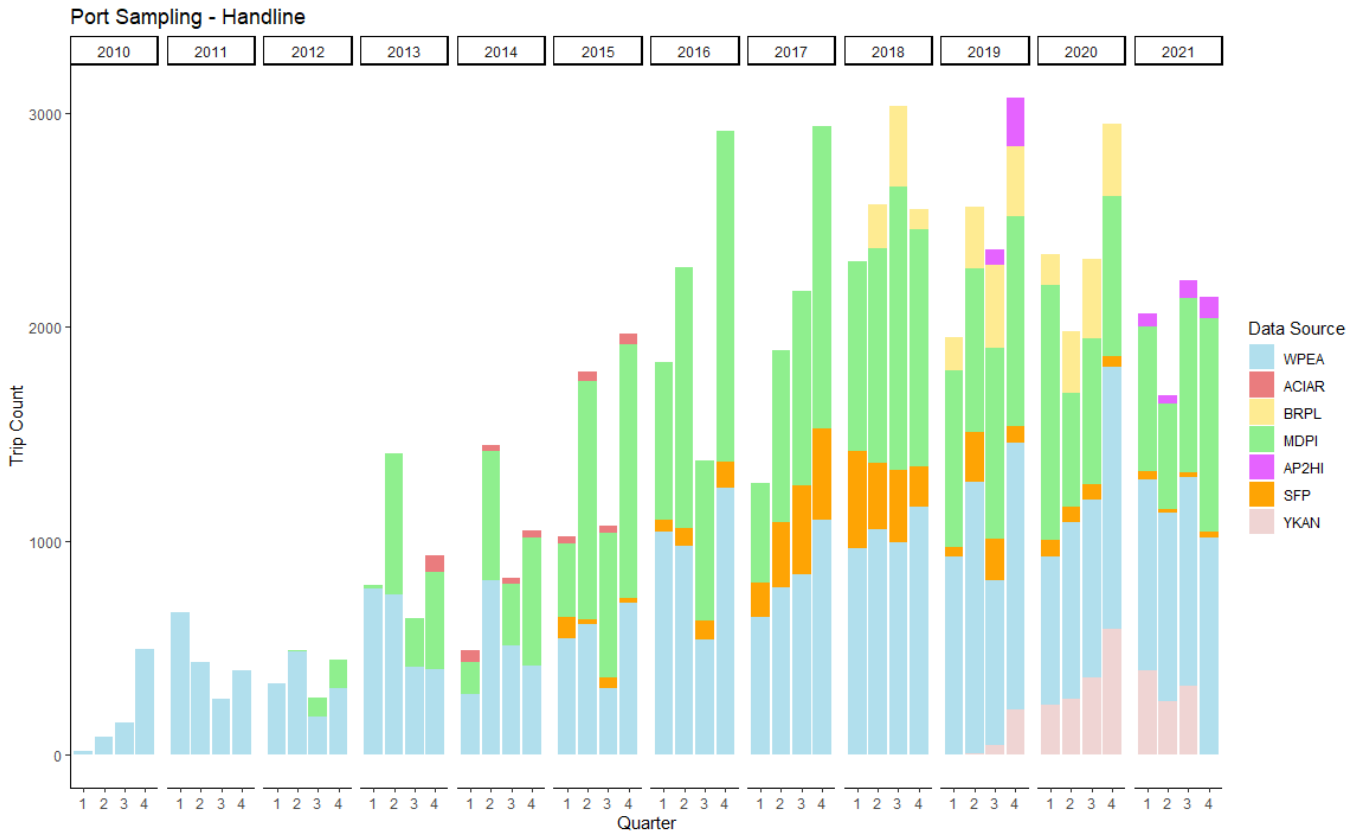
Deviance explained = 26.8%

1. Pole and Line – SKJ

	Port Sampling	Observer	Logbook
Data source	WPEA, ACIAR, BRPL, *MDPI*, AP2HI, YKAN	AP2HI, DJPT	DJPT
Effort data	✓ Number of fishing days	✓ Number of poles	✗ Number of poles unavailable
Catch Data	✓ Catch in kg	✓ Catch in kg	✓ Catch in kg
Temporal Coverage	✓	✓	✓
Spatial coverage		✓	✓
CPUE indices	✓ Deviance explained 68.1%	✓ Deviance explained 26.8%	✗

2. Handline – YFT

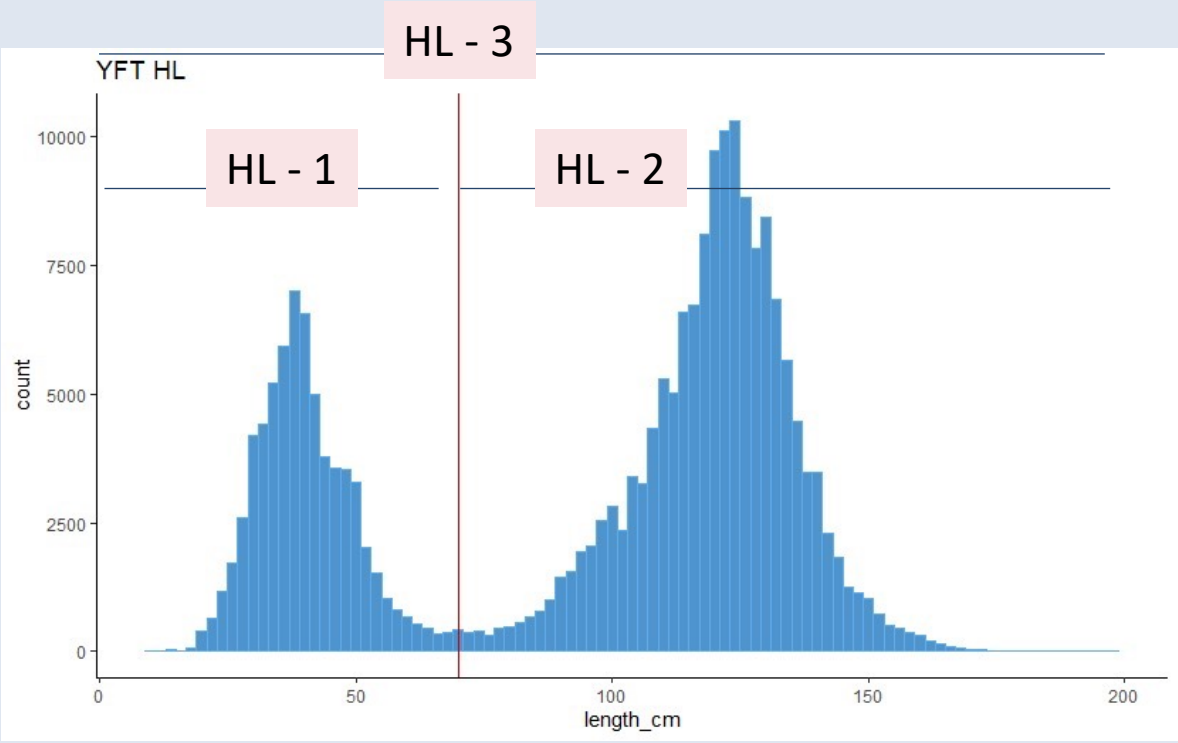
2.1. HL - Port Sampling



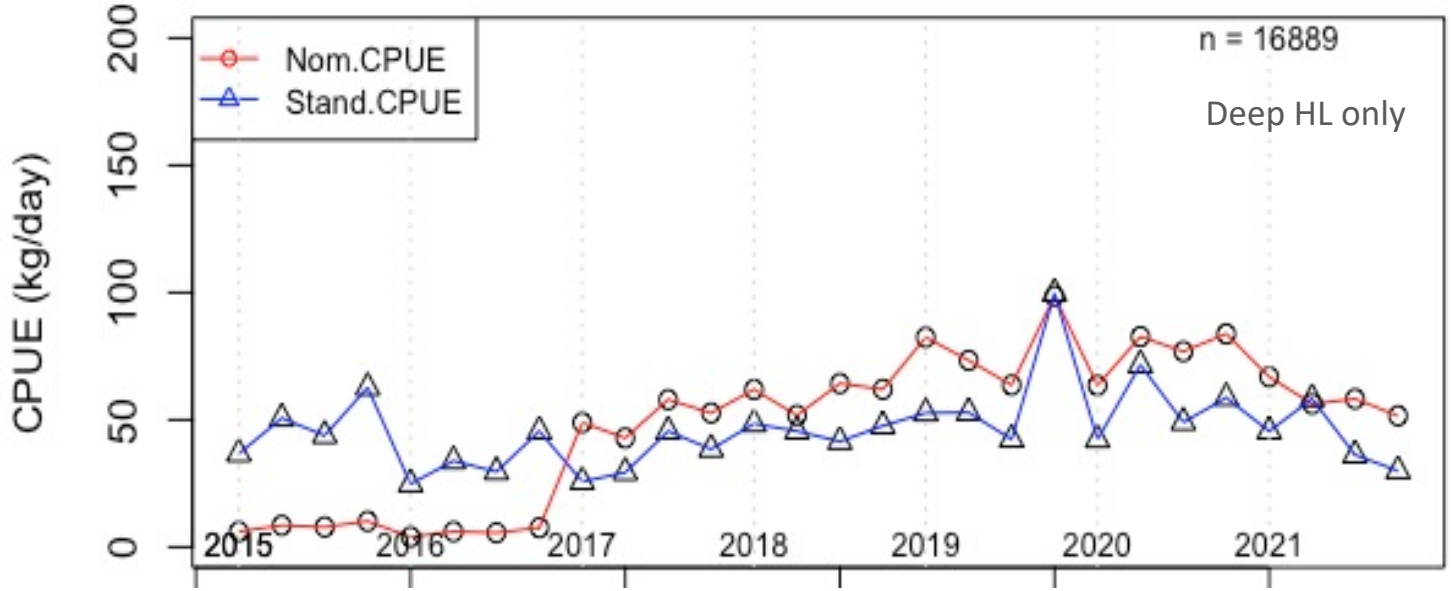
Assumption:

Max catch per trip ~ 2/3*GT*1000

Handline categories



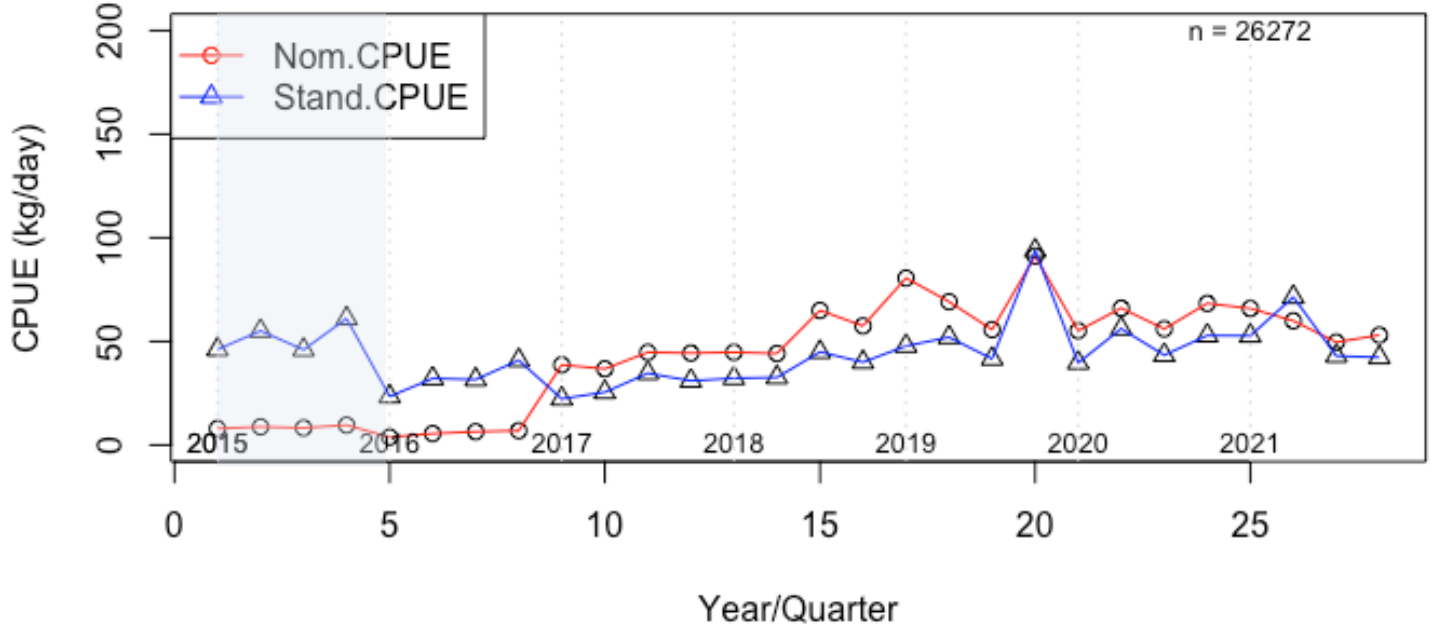
2.1. HL - Port Sampling (cont..)



Assumption:
Maximum YFT catch per trip =~ 2/3 GT
Zero catch data were included

Formula:
YFT catch~ year + month + kab_kota + vessel_id

Deviance explained = 87.3%



Formula:
YFT catch ~ year + month + kab_kota + HL category+ vessel_id

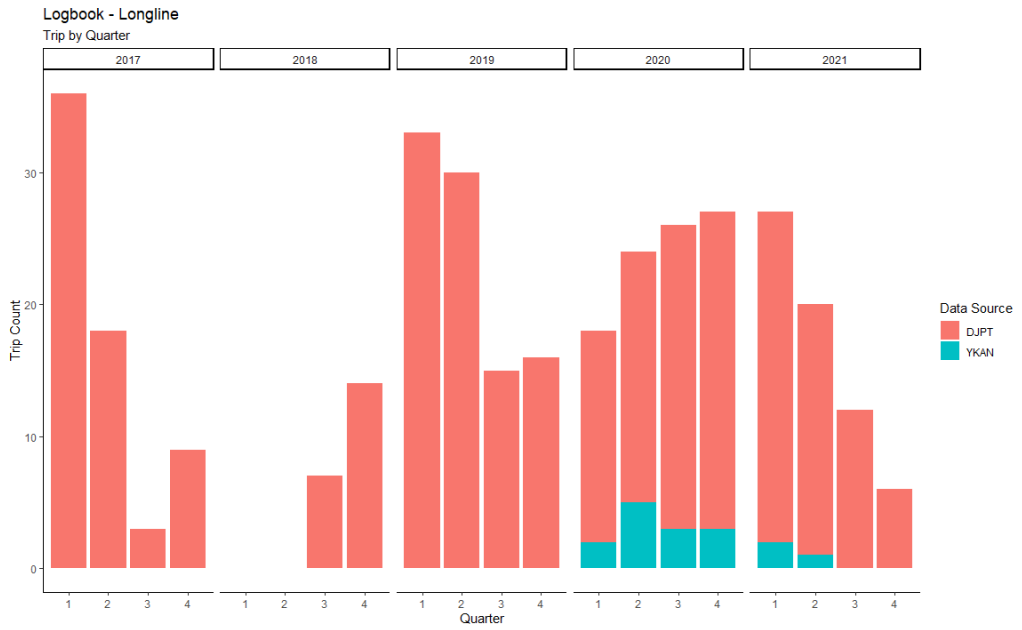
Deviance explained = 86.1%

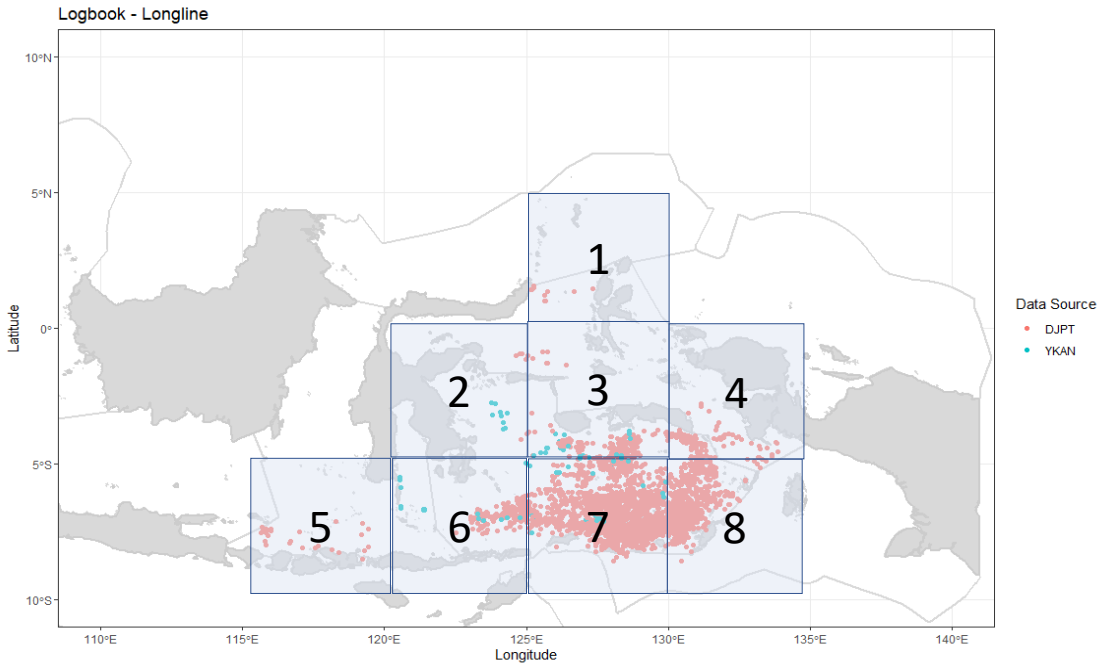
1. Handline – YFT

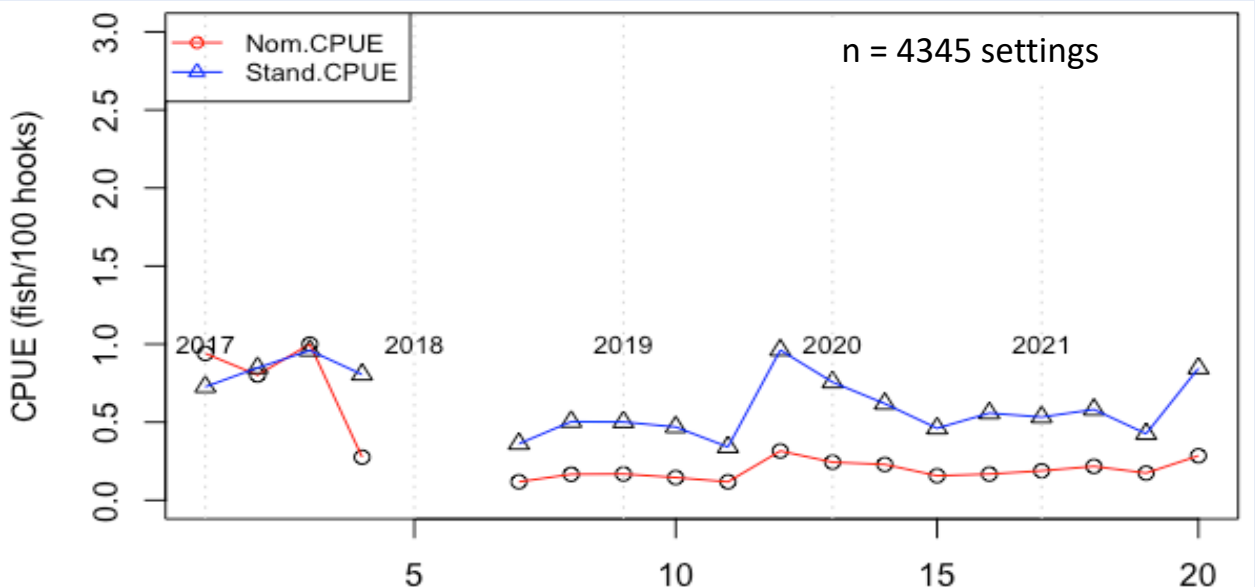
	Port Sampling	Observer	Logbook
Data source	WPEA, ACIAR, BRPL, MDPI, AP2HI, SFP, YKAN	DJPT, MDPI	DJPT
Effort data	✓ Number of fishing days	X?	X ?
Catch Data	✓ Catch in kg	✓ Catch in kg	✓ Catch in kg
Temporal Coverage	✓	X less than 3 years for quarterly data	✓
Spatial coverage			
CPUE indices	✓ Deviance explained 87.3% & 86.1%	X	X

3. Longline – YFT

3.2. LL – Logbook







Assumption:
YFT catch per setting <= 20 fish

Formula:
No. YFT ~ year + month + area+ vessel_id

Deviance explained = 30.9%

3. Longline – YFT

	Port Sampling	Observer	Logbook
Data source	WPEA, BRPL, SFP	DJPT	DJPT, YKAN
Effort data			✓ Number of hooks
Catch Data			✓ Catch in kg
Temporal Coverage	✗	✗ 2017 2-Q; 2020 1-Q	✓
Spatial coverage	✗ Mostly outside IAW		✓
CPUE indices	✗	✗	✓ Deviance explained 30.9%

Thank You!

- DJPT – KKP
- BRPL – KKP
- WPEA (SM-OFM-ITM)
- CSIRO
- MDPI
- AP2HI
- YII
- YKAN
- SFP

PUSAT RISET PERIKANAN
Cibinong Science Center - Gedung Biologi
Jalan Raya Bogor KM. 46 Cibinong, Nanggewer Mekar Kab. Bogor
Telepon : 081119333632 Surel: prp@brin.go.id Laman: www.brin.go.id

Nomor : B-5780/III.4.9/KS.01/5/2023
Sifat : Biasa
Lampiran : 2 Lembar
Perihal : *Undangan The 14th Indonesian Annual Tuna Fisheries Catch Estimates Review Workshop (ITFACE-14)*

Yth, (Daftar Terlampir)
Di Tempat

Sehubungan dengan keanggotaan Indonesia di Western and Central Pacific Fisheries Commission (WCPFC) pada tanggal 28 Agustus 2013, bersama ini kami sampaikan beberapa hal sebagai berikut :

1. Western and and Central Pacific Fisheries Commission (WCPFC) merupakan salah satu RFMO yang mengelola tuna dan sejenis tuna di Samudra Pasifik. Berdasarkan Peraturan Presiden RI Nomor : 61 Tahun 2013 tentang Pengesahan Convention on the Conservation and Management of Highly Migratory Fish Stocks in the Western and Central Pacific Ocean (Konvensi Tentang Konservasi dan Pengelolaan Sediaan Ikan Beruaya Jauh di Samudra Pasifik Barat dan Tengah);

2. Sebagai negara anggota WCPFC, Indonesia berkewajiban menyampaikan estimasi hasil tangkapan (*annual catch estimate-ACE*) tuna melalui Annual Report Part 1 pada 30 April setiap tahunnya. Untuk Estimasi hasil tangkapan tuna tahun 2022, Annual Report Part 1 telah disampaikan kepada WCPFC, namun masih memerlukan validasi dan revisi dari seluruh data provider. Revisi dan Validasi Indonesian Annual Tuna Fisheries Catch Estimate akan dilakukan melalui kegiatan WPEA ITM-WCPFC-ACE Review Workshop bersama DJPT, data provider dan SPC dalam koridor kerjasama Pelayanan Teknologi (Pusyantek) BRIN dengan WCPFC.

3. Berkenaan dengan hal tersebut, kami mengharapkan Saudara dan atau pejabat/staf yang berkompeten untuk hadir dalam acara *"The 14th Indonesian Annual Tuna Fisheries Catch Estimate Review Workshop (ITFACE-14)*" yang akan dilaksanakan pada :

   Hari/Tanggal : Selasa – Rabu / 30-31 Mei 2023
   Waktu : 08.30 s/d Selesai
   Tempat : Hotel Harris Sentul City-BOGOR-INDONESIA
   Agenda : Terlampir

Penyelenggaraan kegiatan ini dibiayai oleh project WPEA ITM dan MDPI dan untuk konfirmasi kehadiran, dapat menghubungi Novalina di 085207766785 dan Regi Fiji di 081315593953.

Demikian kami sampaikan, atas perhatian dan kehadiran Saudara kami ucapkan terima kasih

Cibinong, 26 Mei 2023
Kepala Pusat Riset Perikanan
Badan Riset dan Inovasi Nasional,

TTE ELEKTRONIK

Dr. Fayakun Satria, S.Pi., M.App.Sc

Lampiran 1 Peserta Undangan
Nomor : B-5780/III.4.9/KS.01/5/2023
Tanggal : 26 Mei 2023

No	Pejabat / Nama	Instansi	Jumlah orang
1	Direktur Pengelolaan Sumber Daya Ikan, DJPT (Dr. Ir. Ridwan Mulyana, M.T)	KKP	1
2	Direktur Kepelabuhan Perikanan, DJPT (Ir. Tri Aris Wibowo, M.Si)	KKP	1
3	Ketua Kelompok Kerja Pengelolaan SDI ZEEI dan Laut Lepas (Putuh Suadela, S.Pi., M.E.S.M)	KKP	1
4	Ketua Kelompok Kerja Pemantauan dan Analisis Pengelolaan dan Alokasi SDI, DJPT (Aris Budiarto, S.Pi., M.Si)	KKP	1
5	Koordinator Kelompok, Pusat Data, Statistik dan Informasi, Setjen KKP (Rennisca Ray Damanti, S,Pi., MA,M.Eng)	KKP	1
6	Ketua Kelompok Kerja Pengelolaan SDI Laut Pedalaman, Teritorial dan Perairan Kepulauan dan Kelembagaan SDI WPPNRI Perairan Laut (Fery Setyawan, S.Pi., MPP,MT)	KKP	1
7	Ketua Subkelompok Kerja Data Setditjen Perikanan Tangkap, DJPT (Muhammas Anas, S.Pi., M.S.E.M.A)	KKP	1
8	Ketua Subkelompok Kerja Tata Kelola SDI ZEEI dan Laut Lepas, PSDI – DJPT (Riana Handayani, S.Pi)	KKP	1
9	Ketua Subkelompok Kerja Pemanfaatan SDI ZEEI dan Laut Lepas. PSDI – DJPT (Mumpuni Cynthia Pratiwi, S.Pi., M.E.S.M)	KKP	1
10	Pengelola Produksi Perikanan Tangkap (Yayan Hernuryadin, S.Pi., M.S.E., Ph.D)	KKP	1
11	Ketua Subkelompok Kerja Analisis Pengelolaan dan Alokasi Sumber Daya Ikan (Sri Patmiarsih, S.Pi.)	KKP	1
12	Ketua Subkelompok Kerja Pemantauan Pengelolaan SDI, Dit. Pengelolaan SDI (Ade Setia Januar, S.Pi., M.Si.)	KKP	1
13	Staff Subkelompok Kerja Data Setditjen Perikanan Tangkap, DJPT (Anang Wahyu Susilo, S.Pi)	KKP	1
14	Staff Kelompok Kerja Pemantauan dan Analisis Pengelolaan dan Alokasi SDI, DJPT (Rista Devi Juniar, S.Pi)	KKP	1
15	Analis Data Statistik, BRSDMKP-KKP (I Gede Bayu Sedana, S.Kom)	KKP	1
16	Indonesia WPEA Koordinator (Dr.Fayakun Satria, S.Pi, M.App.Sc)	PRP	1
17	Prof.Dr.Ir.Wudianto, M.Sc	PRP	1
18	Lilis Sadiyah, S.Si, Ph.D	PRP	1
19	Agustinus Purwanto Anung Widodo, M.Si	PRP	1
20	Regi Fiji Anggawangsa, S.Pi	PRP	1
21	Afrisa Novalina	PRP	1
22	Koordinator Bidamg Manajemen Proyek/Pemasaran	Pusyantek	1
23	Sub Koordinator Pengelolaan Layanan IPTEK (Indra)	Pusyantek	1
24	Pelaksana Fungsi Manajemen Proyek (Firman)	Pusyantek	1
25	Mr. Peter Williams	SPC - OFP	1
26	Mr. Lars Olsen	WPEA-ITM	1

27	Barbara Hanchard	WPEA-ITM	1
28	MDPI	MDPI	3
29	YKAN	YKAN	2
30	AP2HI	AP2HI	2
31	YII	YII	1
32	TC	TC	2
33	BeriKAN	BeriKAN	1
34	Asosiasi Purse Seine Indonesia	Asosiasi Purse Seine Indonesia	1

Lampiran 2 Tentative Agenda
Nomor : B-5780/III.4.9/KS.01/5/2023
Lampiran : 26 Mei 2023

Waktu	Acara	Penanggung Jawab
Selasa, 30 Mei 2023		
08.00 – 08.30	Registration	Panitia
08.30 – 08.45	Opening remark : Kepala Pusat Riset Perikanan and Direktur PSDI- DJPT KKP Update the WPEA ITM Project by Fayakun Satria and Lars Olsen	Dr. Fayakun Satria, S.Pi., M.App.Sc Dr. Ridwan Mulyana
08.45 – 09.00	Coffee Break and group Photo	All participants
Sesi 1 Moderator : Fayakun Satria		
09.00 – 09.20	WCPFC Data Requirement, (Including catch and effort data aggregate)	Mr. Peter William
09.20 – 09.40	Update of PIPP-DGCF Indonesia's untuk pendataan hasil tangkapan tuna di WPP 713-717	Direktur Kepelabuhan Perikanan, DJPT
09.40 - 10.00	Review of Progress on Recommendations from ITFACE-13	Putuh Suadela MESM
10.00 - 10.20	National data Collection_for Capture Fisheries (One data and DGCF data collection) (Present status, constraint and future plan)	Muhammad Anas M.SI
10.20 - 10.40	Discussion	
Sesi 2 Moderator : Wudianto		
10.45 - 11.05	Update of logbook Data from Indonesia's tuna fisheries (incl: Catch composition by gear/by species/location)	Aris Budiarto
11.05 - 11.25	Update of Observer Data from Indonesia's tuna fisheries ((incl: Catch composition by gear/by species/location)	Ade Januar
11.25 - 11.45	Discussion	
11.45 – 12.05	Data collection by WPEA year 2022 (maximum 4 slides): 1. Introduction 2. WPEA-Data base 3. Catch composition by gear/by species/location 4. Sampling Documentation	I Gede Bayu Sedana
12.05 - 12.30	Discussion	
12.30 - 13.30	Break and Lunch	

Sesi 3 Moderator : Anung Widodo		
13.30 – 13.50	Potential sources of CPUE data.	Dr. Lilis Sadiyah
13.50 - 14.05	Data collection by MDPI year 2022 (maximum 4 slides): 1. Introduction 2. Catch composition by gear/by species/location 3. Sampling Documentation	MDPI
14.05 – 14.30	Data collection by YKAN year 2022 (maximum 4 slides): 1. Introduction 2. Catch composition by gear/by species/location 3. Sampling Documentation	YKAN
14.30 - 14.45	Discussion	
14.45 - 15.05	Break	
Sesi 4 Moderator : Lilis Sadiyah		
15.05 – 15.20	Data collection by AP2HI/YII year 2022 (maximum 4 slides): 1. Introduction 2. Catch composition by gear/by species/location 3. Sampling Documentation	AP2HI/YII
15.20 - 15.35	Data collection by SFP year 2022 (maximum 4 slides): 1. Introduction 2. Catch composition by gear/by species/location 3. Sampling Documentation	SFP
15.35 - 15.45	Update/Plan Data Collection in Sorong	Anung Widodo
15.45 - 16.05	Discussion	
16.10	Closes	

Waktu	Acara	Penanggung Jawab
Selasa, 31 Mei 2023		
Sesi 1 Moderator : Fayakun Satria		
09.00 – 10.45	Discussion on Catch estimate for 2022 by GEAR and SPECIES -(Long Line-LL)	Ketua Subkelompok Kerja Data Setditjen, DJPT
	Discussion on Catch estimate for 20222 by GEAR and SPECIES -(Pole and Line -PL)	Ketua Subkelompok Kerja Data Setditjen, DJPT
Sesi 2 Moderator : Anung Widodo		
10.45 - 12.30	Discussion on Catch estimate for 20222 by GEAR and SPECIES -(Hand Line-HL)	Ketua Subkelompok Kerja Data Setditjen, DJPT
	Discussion on Catch estimate for 2022 by GEAR and SPECIES -(Purse Seine-PS)	Ketua Subkelompok Kerja Data Setditjen, DJPT
12.30 – 13.30	Break and Lunch	
Sesi 3 Moderator : Wudianto		
13.30 – 14.30	Discussion on Catch estimate for 20222 by GEAR and SPECIES -(Gill net - GN and other gears)	Ketua Subkelompok Kerja Data Setditjen, DJPT
14.30 - 15.30	Revisit outstanding issue from previous sessions	
15.30 – 16.20	Recommendation	
16.20	Closes	