

CURRENT NATIONAL TUNA MANAGEMENT AND EXPECTED OUTPUT FROM HARVEST STRATEGY WORK IN RELATION TO THE SHORT TERM MANAGEMENT ACTION

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Technical Workshop on Harvest Strategy for Indonesia's Tuna Fishery
The Fifth Technical Workshop
Bogor, 28 – 29 October 2019



**Ministry of Marine Affairs and Fisheries
Republic of Indonesia @2019**



LEGAL ASPECT: **ADOPTION INTERNATIONAL RULES INTO NATIONAL LAW & REGULATIONS**



INTERNATIONAL RULES

UNCLOS 1982 (Article 64) ratified by Law No. 17/1984:

→ Underlines to cooperate in ensuring tuna conservation & utilization in EEZ & high seas thru an organization (tuna RFMO)

UNIA 1995 (Article 17: Para 2) ratified by Law No. 21/2009:

→ Non member state shall not authorize vessels for catching tuna which are subject to CMM established by an organization

FAO CCRF 1995:

→ Para 3 in Relation with other Int. Instrument: (3.2) tuna conservation & management implementation consistent with UNCLOS 1982

→ General Principles: Para 6.2: Ensuring conservation belonging to the same ecosystem

NATIONAL LAWS

FISHERIES LAW 30/2004 amended by 45/2009 (Article 10: Para 2):

→ Underlines to actively participate in RFMOs & International For a

OPERATIONAL BASIS:

→ IOTC: Presidential Reg. 9/2007 (5 March 2007)

→ CCSBT: Presidential Reg. 109/2007 (6 Dec 2007)

→ WCPFC: Presidential Reg. 61/2013 (28 Aug 2013)

→ IATTC: as CNM (June 2013), shall be proposed each year for its renewal

Note: INDONESIA has ratified & adapted International Tuna Rules into National Law and Regulations

IMPLEMENTING REGULATIONS

Ministerial Decree of MAF 107/2105:

- Tuna, Skipjack and Neritic Tuna Fishery management Plan: a direction and guidance for central and regional government for tuna conservation & management implementation in Indonesia (Revised every 5 years)

Ministerial Regulation No. 30/2012 jo. 26/2013 jo. 26/2015:

- Regulate capture fisheries business, fishing license, Database Sharing System, and others: all catches shall be landed at port

Ministerial Regulation No. 12/2012:

- Regulates vessel operating in EEZ & high seas

Other Ministerial Regulations, i.e.:

- VMS Installment
- Fishing Logbook & Observer
- FAD Control Regulation
- Tuna Moratorium at Banda Sea
- CPIB & SHTI
- Transshipment Prohibition and etc.



INDONESIAN STATUS IN RFMOs



Indian Ocean Tuna Commission (IOTC)

Status: Full Member, Ratification thru Perpres. No 9/2007, on 5 March 2007

Contracting Party: 32 Countries

Australia, China, Comoros, Eritrea, European Union, France, Guinea, India, Indonesia, Iran, Japan, Kenya, Korea, Madagascar, Malaysia, Maldives, Mauritius, Mozambique, Oman, Pakistan, Philippines, Seychelles, Sierra Leone, Somalia, Sri Lanka, South Africa, Sudan, Tanzania, Thailand, United Kingdom, Yemen, Bangladesh

Cooperating Non-Contracting Parties: 2 Countries Liberia, Senegal



Western Central Pacific Fisheries Commission (WCPFC)

Status : Full Member, Ratification thru Perpres No 61/2013, on 28 August 2013

Member: 26 Countries: Australia, China, Canada, Cook Islands, European Union, Federated States of Micronesia, Fiji, France, Indonesia, Japan, Kiribati, Republic of Korea, Republic of Marshall Islands, Nauru, New Zealand, Niue, Palau, Papua New Guinea, Philippines, Samoa, Solomon Islands, Chinese Taipei, Tonga, Tuvalu, United States of America, Vanuatu

Participating Territories: 7 Territory

American Samoa, Commonwealth of the Northern Mariana Islands, French Polynesia, Guam, New Caledonia, Tokelau, Wallis and Futuna

Cooperating Non-Members: 7 Negara

Ecuador, El Salvador, Mexico, Panama, Liberia, Thailand, Vietnam



Archipelagic Tuna (WPP 713, 714, 715)

Commission for the Conservation of Southern Bluefin Tuna (CCSBT)

Status: Full Member Ratification thru Perpres No 109/2007 On 6 December 2007

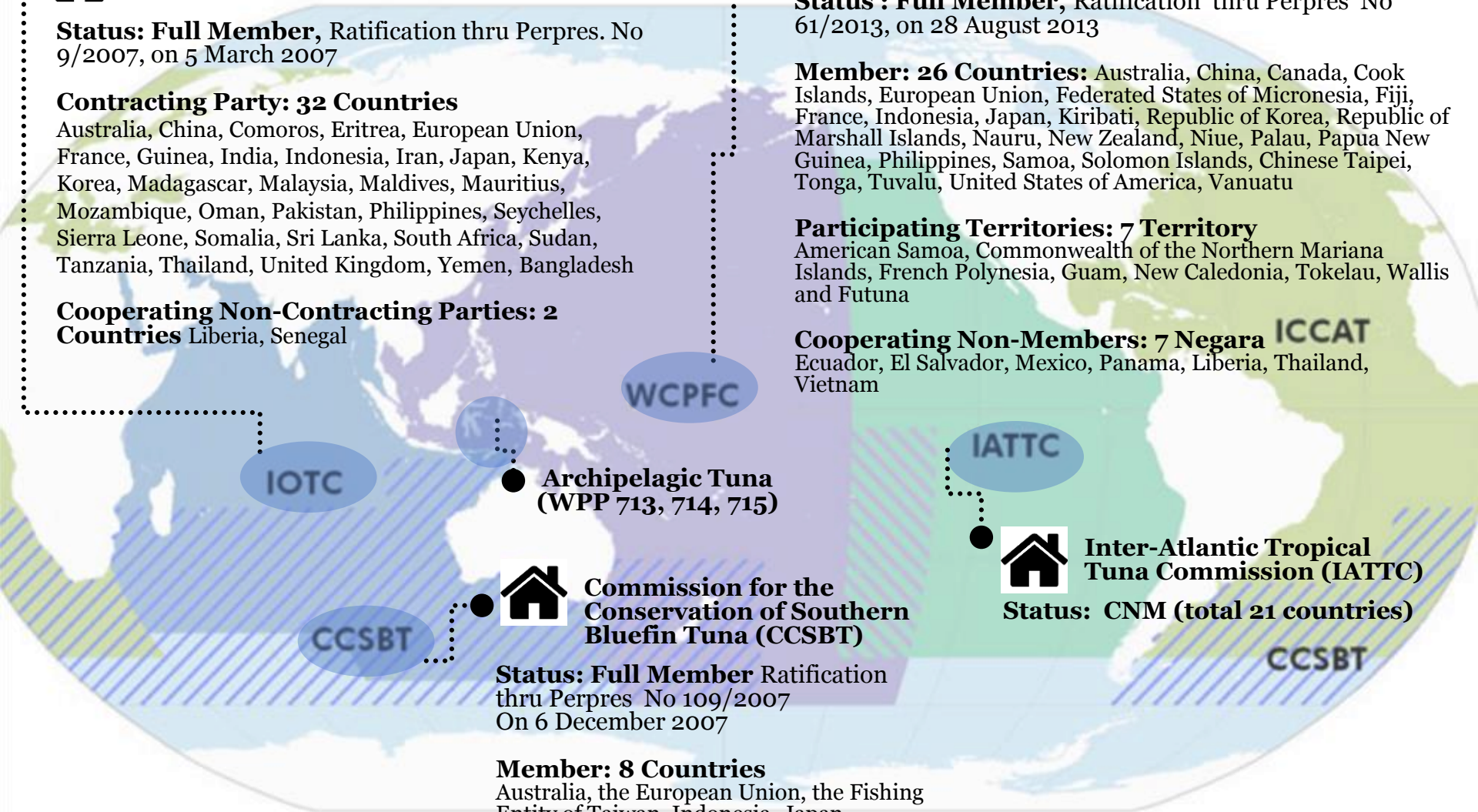
Member: 8 Countries

Australia, the European Union, the Fishing Entity of Taiwan, Indonesia, Japan, Republic of Korea, New Zealand and South Africa



Inter-Atlantic Tropical Tuna Commission (IATTC)

Status: CNM (total 21 countries)





TUNA STOCK STATUS



Indian Ocean Tuna Commission (IOTC)

Big Eye Tuna: Not Subject to Overfishing

Catch in 2017 : 90,050 Tons

Average catch 2013-2017 : 95,997 Tons

MSY: 104,000 Tons

Yellowfin Tuna: Subject to Overfishing

Catch in 2017: 409,567 Tons

Average catch 2013-2017 : 399,830 Tons

MSY: 403,000 Tons

Albacore: Not Subject to Overfishing

Catch in 2017: 38,347 Tons

Average catch 2013-2017 : 36,004 Tons

MSY: 38,800 Tons

Skipjack Tuna: Not Subject to Overfishing

Catch in 2017: 524,282 Tons

Average catch 2013-2017 : 454,103 Tons

Y: 510,100 Tons

**Archipelagic Tuna
(WPP 713, 714, 715)**



**Convention on
Conservation of Southern
Bluefin Tuna (CCSBT)**



Southern Blue Fin Tuna:
Subject to Stock Recovered Catch.
MSY in 2017: 33,038 Tons
JTB in 2018: 17,647 Tons



Western Central Pacific Fisheries Commission (WCPFC)

Big Eye Tuna: Subject to Overfishing

Catch in 2017: 126,929 Tons

Mean MSY (2012-2015) : 158,551 Tons

Yellowfin Tuna: Overfishing is not occurring

Catch in 2017: 670,890 Tons

Mean MSY (2012-2015) : 670,658 Tons

Skipjack Tuna: Overfishing is not occurring

Catch in 2017: 1,624,162 Tons

MSY (2015) : 1,891,600 Tons

Projected to decline in short term but then
To recover in the longer term



**Inter-Atlantic Tropical
Tuna Commission (IATTC)**

None of Indonesia Vessel
Currently Operated in IATTC

 = Overfishing

INDONESIA TUNA FISHERIES MANAGEMENT

1

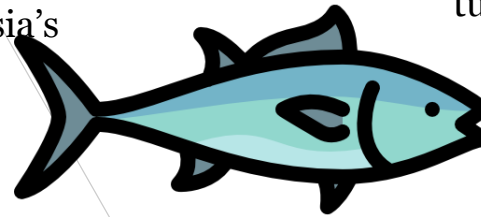
Improvement of Fish Data and Implementation of E-Monitoring and E-Reporting

- ONE DATA: integrating all tuna data in One Database
- Increase Logbook Submission, developing E-Monitoring and E-Reporting
- Comply with 5% Observer Coverage
- Reporting on ERS data
- Reporting on tuna data and Indonesia's compliance to RFMO

2

Improvement of Vessel Registration System to RFMO

- Automatic Registration Data for tuna fishing vessel (DIVA-TUNA) in Archipelagic Waters
- Registration to RFMO for tuna fishing vessel with LOA 24m above
- Registration to RFMO for small scale tuna fishing vessels operate in high seas



3

Certification Process i.e. To Address Traceability Issues

- Good Handling Process on Board (CPIB)
- Awareness Building & Technical Capacity Building
- Fisheries Improvement Program (FIP) for Marine Stewardship Council Certificate Assessment Process
- Compulsory Catch Certification Scheme (SHTI) for Vessel Landed Catches in All Fishing Port
- Catch Documentation Scheme for Southern Blue Fin Tuna
- FAIR TRADE, etc.

4

FAD Control regulation

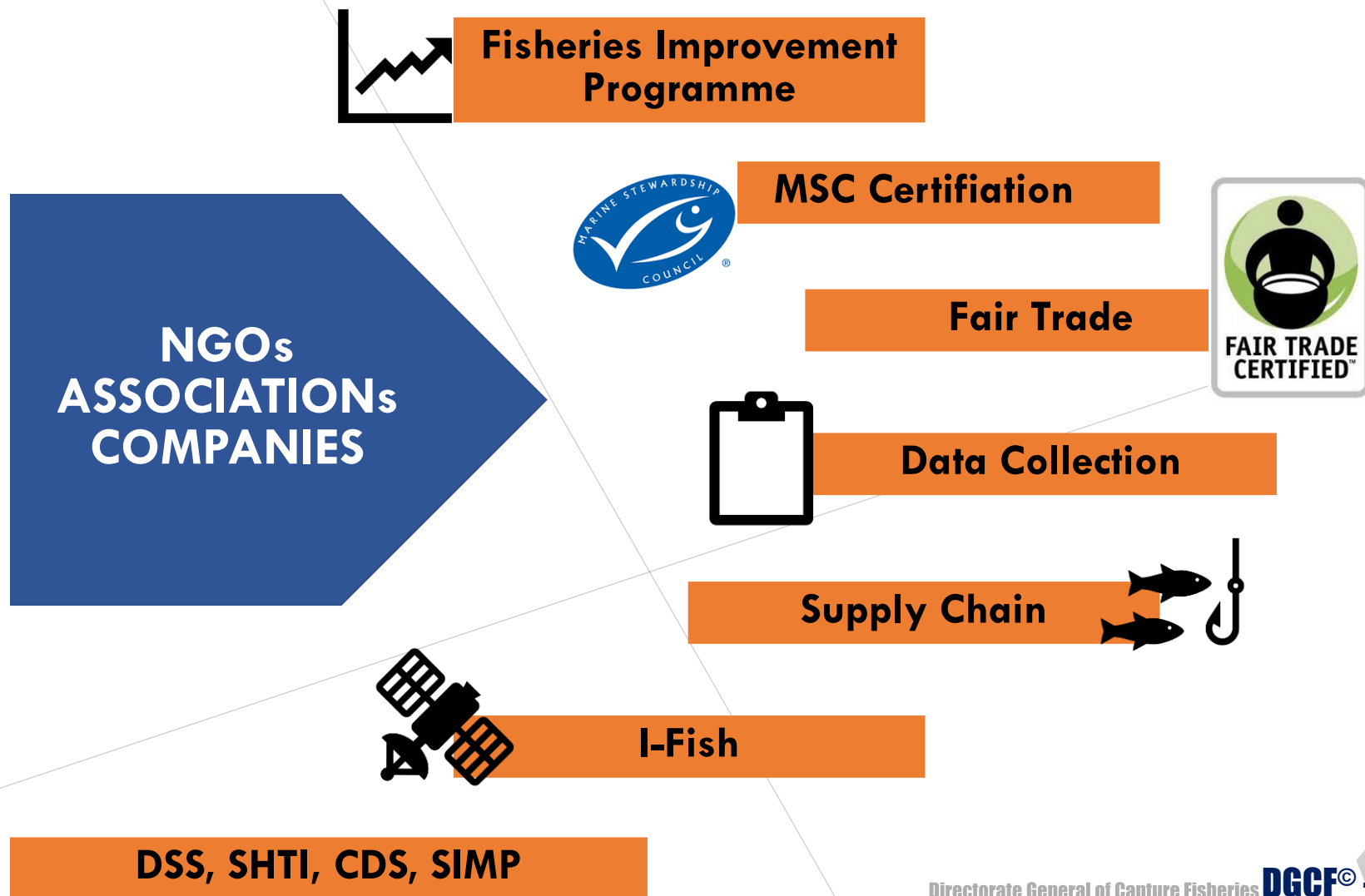
- Data collection, control FAD deployment
- FAD closure for 6 month in Pacific Ocean

5

Implementation on Harvest Strategy Framework for Archipelagic Tuna (FMA 713, 714 and 715)

- Implementing Harvest Strategy Framework for Tropical Tuna in Archipelagic Waters compatible with WCPFC provisions and to claim Indonesia sovereignty to utilize tuna resources in archipelagic waters
- Develop Harvest Control Rules and Management Procedures

COLLABORATION FOR SUSTAINABLE FISHERIES MANAGEMENT – CERTIFICATION



COLLABORATION FOR SUSTAINABLE FISHERIES MANAGEMENT – CERTIFICATION



JOINT COMMITMENT MMAF - IPNLF

MSC CERTIFICATION



MOU DGCF - AP2HI

FISHERIES IMPROVEMENT PROGRAM FOR POLE & LINE, HAND LINE AND TROLL LINE

20% OBSERVER COVERAGE LEVEL (MSC STANDARD)



SUPPORT VESSEL SCHEME ATLI

COLLECTING VESSEL SCHEME FOR LONGLINE VESSEL



FIP FOR PURSE SEINE? HNP

SURVEY ON SOCIO-ECONOMY STUDY

FAIR TRADE MDPI & USAID

REPLICATION OF THE SUCCESS STORY

HARVEST STRATEGY DEVELOPMENT PROCESS & RESULT

LEGAL BASIS : DEVELOPING HARVEST STRATEGY/HARVEST CONTROL RULE in Indonesia FMA 713,714 and 715



Ministerial Decree of MAF 107/2105:

Tuna, Skipjack and Neritic Tuna Fishery management Plan: a direction and guidance for central and regional government for tuna conservation & management implementation in Indonesia

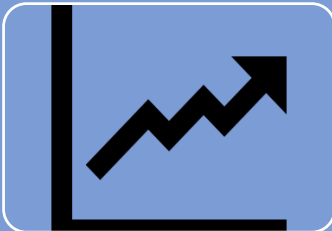
1.2.2.1. Objective 1 Point 3

Availability of harvest control rules and 100% of tuna and skipjack stock keys indicator data in 2016

Responsible working unit:
“DGCF dan BRSDMKP”

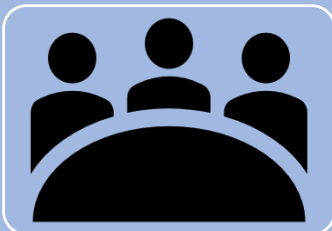


Several **WORKSHOP** have been conducted since 2014 supported by Local Governance, Fishing Ports, Association, Industries, NGOs and International Experts.



Technical Data Workshop (4 times)

4th Technical Data WS, Bogor, 30-31 October 2017



Stakeholder Workshop (8 times)

7th Stakeholder WS, Bogor, 1-2 November 2017

1st Stakeholder WS for HS Implementation, Bogor, 21-23 November 2019

- A survey on perception from stakeholders was carried out at the 4th Stakeholder Workshop, 14-16 November 2016 in Bogor, to identify main pressures on tuna resources condition in Indonesia, particularly in Indonesia FMA 713, 714 and 715 which could threaten the sustainability are :
 1. Too much purse seine fleets;
 2. Too much deployed FAD;
 3. Destructive tuna fishing practices occurring
- Based on above opinion, there is a need to manage purse seine fishery and limit FAD deployment, including eliminate destructive fishing practices to ensure the sustainability of tuna resources in Indonesia FMA 713, 714 and 715.

- A survey on opinion was carried out at the 4th Stakeholder Workshop, 14-16 November 2016 in Bogor
- A questionnaire was formed in order to gain the stakeholders' opinion regarding the potential management action for the harvest strategy of tuna fisheries in Indonesia.
- The questionnaire was consist of 3 (three) parts, hypothetical scenarios, the option of future fisheries management, and things that need to be discussed

- A risk based assessment was carried out at the 6th Stakeholders Meeting on 12-13 July 2017 to select potential management objective, operational objectives and management measures.
- A questionnaire was developed based on Article 3 Act No. 31 year 2004 which was amended by Act No. 45 year 2009 on Fisheries.

[Selected & Agreed] MANAGEMENT OBJECTIVES

- Ensure fish resources sustainability

[Selected & Agreed] OPERATIONAL MANAGEMENT OBJECTIVES

- Maintain spawning stock biomass (SSB) above the limit reference point (LRP) of $0.2 \text{ SSB}_{F=0}$, *at least 90% of the year during the 10 years projection period.*

[Selected & Agreed] MANAGEMENT MEASURES

1. FAD Limitation [number of FAD, fishing operation associated with FAD]
2. Spatial closures (of important spawning or nursery grounds) and temporal closures (during important events such as spawning)
3. Number of fishing days (per gear, for semi industrial and industrial vessels)
4. Number of vessels – limited entry (per gear; for semi industrial and industrial vessels through licensing, permits, taxing, royalties)
5. Total Allowable Catch (TAC) [or catch] limits per Fisheries Management Area

Harvest strategy candidates:

1. Harvest strategy based on Catch per Unit Effort (CPUE) indicator; and
2. Harvest strategy based on size distribution

Current project result for skipjack:

- CPUE trend for skipjack in Indonesia FMA 713, 714 and 715. is based on number of fishing days and mean length size of fish caught.
- Based on above harvest strategy candidates, the Trial Target Reference Point can be set to determine [interim] harvest control rules candidates or management measures for skipjack fisheries in Indonesia FMA 713, 714 and 715.

A prototype **operating models** (OMs) within the MSE has been developed to explore alternative management actions and their relative performance in meeting specific management objectives using two abundance indices, namely:

- standardized catch-per-unit-effort (CPUE); and
- mean length.

- The harvest strategy framework has been soft-launched at the 3rd Bali Tuna Conference on 31 May 2018.
- A paper has been submitted at the 14th Regular Session of Scientific Committee WCPFC on August 2018 in Busan to present the latest status of the framework development.



- To **carry out meetings** related to the implementation of HS in each IFMA location with the aim of:
 - **Increasing stakeholders' understanding** of HS;
 - **Agree and determine choices** and details of the 5 (five) options of fisheries **management measures** that will be considered in HS implementation include: **(1)** control of the number and use of FADs, **(2)** seasonal/periodic closure of fishing ground **(3)** control of number of fishing operation days **(4)** control of the number of vessels, and **(5)** control on the level of catches.
- All parties agree to implement or support the implementation of **data collection** which is the main input for the implementation of HS, including **adding 2016-2018 data** based on agreed form, particularly on catch landings data and operational data on fishing



- To strengthen the connection of IFMA management council's work with the implementation of HS, including by **increasing IFMA management council role** in the process of determining the control of tuna utilization.
- To **implement tuna allocation criteria** for each FMA and fisheries according to the principle of sustainability, fairness and compliance with fisheries.
- To **collect broader socio-economic data** or integrate the result of past socio-economic studies to determine further impact of the implementation of management actions obtained from HS / HCR. Each institution on central government, local government, NGOs, association, and fishing industries is suggested to collect data and/or integrate the data onto the database system under the supervision of central government.



- To re-consider the use of **standardized longline CPUE data** for **Yellowfin Tuna** because it is considered better for abundance index analysis as it is not associated with FADs. The recent return in longline activity may mean it can provide useful relative abundance series in the future. As the hand line data is largely associated with FADs it may not be a reliable index of yellowfin abundance for the area. Longline data is expected to be obtained from the Observer program in WPP 713, 714 and 715.
- It is expected that in the future, the **logbook data** can provide the **operational catch and effort data** as needed, especially for fishing days for CPUE standardization.
- To recommend that there will be **no further increase in fishing capacity** (number of fishing licenses) for **yellowfin tuna fisheries** that are utilized by **industrial fisheries** (beyond 30 GT) until HS for yellowfin tuna is further refined through further consultation with all stakeholders in 2019.



- To recommend that there will be **no further increase in fishing capacity** (number of fishing licenses) for **skipjack by industrial fisheries** (beyond 30 GT) until Re-Assessment of tuna status in WCPO is set further in 2019.
- To reactivate of **vessel registration applications** that catch tuna in Indonesian waters (R-VIA) to improve the accountability of tuna, skipjack and neritic tuna fisheries management. → **DIVA TUNA**
- To **internalize HS into** the tuna, skipjack and neritic tuna fisheries management plan during the revision process of the Minister Decree No. 107/KEPMEN-KP/2015 concerning **the Management Plan** for Fisheries for Tuna, Skipjack and Neritic Tuna for 2020-2024.



- To **develop exchange mechanism** on compatible tuna data from NGOs to be included in **e-BRPL** database system and coordinate the data collection system for the implementation of HS. It is recommended not to change the data base platform used by each NGO, but search for database developers to integrate the systems of each NGO, association, and fishing industries. Recommend holding a meeting related to data before March 4, 2019.
- To conduct a **review on the implementation of Ministerial Decree of Marine Affairs and Fisheries Number 04 Year 2015** on The Restriction of Fishing Activity within the Indonesia Fisheries Management Area 714 related to the protection of small scale fishers.

- Adding 2016-2018 data based on agreed form, particularly on catch landings data and operational data on fishing.
- Data submission due date on 4 March 2019.
- Data was submitted by: Pusriskan, NGO (MDPI dan SFP), DJPT (Log book dan Observer) dan One Data.

- Workshop was held on 9-10 May 2019
- Data exploratory for tuna fisheries in FMA 713, 714 and 715 year 2016-2018 from Pusrisan, NGO (MDPI dan SFP), DJPT (Log book dan Observer) dan One Data
- Analysis selectivity on Longline, Pole and line, handline fisheries in FMA 713, 714 and 715
- Develop Short Term Management Measure for tuna fisheries in archipelagic waters as one step of Harvest Strategy and NTMP implementation.

HARVEST STRATEGY DEVELOPMENT FOLLOW-UP ACTION

Management Strategy Evaluation

- Refining harvest strategy specification based on technical evaluation
- Provide conclusion to design adaptive management strategies (Implementation of Selected Measures/HCR) → time frame?
- Monitoring Series Data Collection (New Framework/Improvement)

Stakeholder Consultation

- Provide harvest strategy candidates to stakeholders for public consultation
- Considerate stakeholders' input for refining harvest strategy candidates and identifying prioritized action

Proposed documents to be legalized through Ministerial Decree:

1. Interim Harvest Strategy for Skipjack in Indonesia FMA 713, 714 and 715;
2. Interim Harvest Strategy for Yellowfin Tuna in Indonesia FMA 713, 714 and 715;
3. Harvest Strategy Policy.

REVISION OF NTMP for 2020-2024:



- **Ministerial Decree of MAF 107/2105:** Tuna, Skipjack and Neritic Tuna Fishery management Plan for 2015-2019. The NTMP need to be **revised** every 5 (five) years.
- In 2019: Drafting NTMP for 2020-2024:
 - The proposed revision will include the implementation harvest strategy and harvest control rules for tuna fisheries in Indonesia FMA 713, 714 and 715.
 - Limitation/Quota for each Regional/Each Fishery will be determined (Time Framework? 3 years?)
 - Defining Criteria for Allocation: Sustainability, Fairness, Compliance

THANK YOU

