

**CONCLUSION AND RECOMMENDATION**  
**2<sup>nd</sup> Stakeholders Meeting on the Implementation of Harvest**  
**Strategy for Tuna Fisheries in FMA 713, 714, and 715**  
Bogor, 30-31 October 2019

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**A. CONCLUSION**

1. Archipelagic Waters (Indonesia Fisheries Management Area 713, 714 and 715), are part of the Indonesian waters territory flanked by 2 (two) Great Oceans namely: Indian and Pacific Oceans which are rich in tuna resources. In the last 14 years (2005-2018) the estimated average catches of tuna (skipjack tuna, yellowfin tuna, bigeye tuna and albacore) from the archipelagic waters reached 298,586 tons or around 53% of the estimated total catches of the national tuna catches of skipjack tuna, yellowfin tuna, bigeye tuna and albacore with an average of 567,867 tons per year. Therefore, in order to ensure the sustainability of resources and tuna fisheries business in the archipelagic waters, the 2<sup>nd</sup> Stakeholder Meeting considers it is important that the Government and all other relevant stakeholders continue to consistently implement the Interim Harvest Strategy Framework that was launched at the Bali Tuna Meeting 3rd Conference, May 31<sup>st</sup>, 2018. The implementation of this Harvest Strategy is one of the important basic elements and is needed in ensuring the sustainable management of tuna fisheries and this Harvest Strategy concept has been adopted by the tuna Regional Fisheries Management Organizations (RFMOs) including Western and Central Pacific Fisheries Commission (WCPFC).
  
2. The preparation of the Harvest Strategy (HS) document for tuna fisheries in FMA 713, 714 and 715, which has been carried out since 2014, was updated at the 5<sup>th</sup> Technical Workshop, which was held in Bogor on October 28<sup>th</sup>-29<sup>th</sup>, 2019. Then the results are presented at the 2<sup>nd</sup> Stakeholder Meeting. Matters that were updated based on 2016-2018 series data input include:
  - a. Increase the number of datasets used from 3 to 7 datasets (WPEA (Centre of Fisheries Research WCPFC), FADs (ACIAR-CFR), Log Book (*Directorate of Fish Resources Management – Director General of Capture Fisheries*), BRPL, i-fish data (MDPI, AP2HI and LINI/SFP),
  - b. Estimation of the relative abundance index of skipjack (SKJ) with the CPUE standardization approach
  - c. Selectivity analysis to see the ability of fishing gear in selecting fish length measurements on longline, pole and line, handline and purse seine fishing gear in FMA 713, 714 and 715.

3. Based on the results of the 5<sup>th</sup> Technical Workshop where the results were presented at the 2nd Stakeholder Meeting, it was concluded that the candidate of Harvest Control Rules (HCR) could not yet be used as a reference in determining the Trial Target Reference Point. The Prototype of Operating Model that was built in 2018 still needs updating. Besides that, it was noted that the series 2016-2018 data input on the Prototype of Operating Model could not be used yet.
4. The input data for 2016-2018 is incomplete, not yet representing the whole data that can describe the dynamics per quarter. The relative abundance index for Yellowfin Tuna cannot be estimated yet because there is still limited longline data that cannot describe quarterly or seasonal variations, and selectivity analysis for Yellowfin Tuna from one of the Pole and Line data sets cannot be estimated because the fitting model is not fulfilled. After the data has been corrected, the Operating Model prototype can be updated.
5. Although data improvements are still needed to further implement the Harvest Strategy, the 2nd Stakeholder Meeting noted a number of improvements for the analysis of skipjack abundance data (CPUE Standardization, Deviance Explained reaching around 76%). Related to yellowfin tuna (YFT), based on the results of analysis of length distribution and selectivity of long line fishing gear, there is a possibility of improvement of yellowfin tuna stock status where there is a tendency to increase the size of yellowfin tuna catches, with catch length sizes greater than length at first maturity (100 cm) enlarged from 133.7 cm (2010-2012) to 149 cm (2017-2018). But it is too early to conclude that the stock condition has improved, this is because the number of analysed sample is still very small (10% of the total sample of the same study results in 2010-2012). The meeting agreed that the longline data needed for further analysis could be improved and fulfilled from stakeholders associated with the long line fisheries in FMA 713, 714 and 715.
6. Based on the results of studies on the selectivity of fishing gear and length distribution of skipjack catches (SKJ) from each pole and line fishing gear, purse seine and hand line tend to be more dominantly caught above length at first maturity (40 cm). In contrast to yellowfin tuna (YFT), catches from pole and line, hand line (operated on the surface and use small fishing line sizes) and purse seine contribute to the capture of the size below the length at first maturity (100 cm). The meeting agreed on the need to limit the number, season and size of fish caught further from purse seine catches and control of the purse seine operating area, after going through a comprehensive study.

7. Based on the results of the 2017 tuna stock assessment in the region conducted by the WCPFC for Yellowfin Tuna, Indonesia is included in the Stock Assessment Region 7 (covering the utilization by the Philippines, Vietnam, Papua New Guinea and Indonesia). The results of the latest study conducted in 2017 throughout the WCPFC region (9 Regions) illustrate the rate of utilization rate which tends to decrease, where the average spawning biomass ratio at this time to unfished spawning biomass is in the position of 0.33. The tendency to decline in the past 10 years also occurred in Region 7 with the current ratio of spawning biomass to unfished spawning biomass lower at 0.27.
8. Meanwhile, the results of the stock study conducted by the WCPFC on Skipjack Tuna (SKJ) in 2019, recommend the addition of regions in the distribution of the Stock Assessment Region from previously 5 regions to 8 regions. Indonesia, which was originally in Region 4, is now in Region 5. The results of the study show that the current Spawning Biomass ratio to Unfished Spawning Biomass in WCPO is 0.44 in the last three years, this has been made possible as a result of improved data collection that has been done. However, in region 5, the current spawning biomass ratio to unfished spawning biomass is currently in the position of 0.25 or is slightly above the reference point limit (0.20).
9. Although the harvest control rules and trial target reference point cannot be agreed upon further, the 2<sup>nd</sup> Stakeholder Meeting agreed on 5 (five) management action options agreed at the 6<sup>th</sup> Strategy Harvest Preparation Meeting in 2017 to be implemented in the framework of implementation The Harvest Strategy, needs to be preceded by a comprehensive evaluation before carrying out the 5 Management Options as follows: (1) controlling the use of FADs, (2) closing certain fishing areas (3) controlling the number of fishing operations days (4) controlling the number of ships, and ( 5) control of the level of catches.
10. The meeting also looked at strategic efforts in the implementation of the Harvest Strategy, it was necessary to pay attention to the aspects of protection and welfare of small fishermen (<10 GT), given the significant contribution of this small-scale fishery.

## **B. RECOMMENDATION**

1. Recommend all parties to improve the discipline of data collection which is the main input for the implementation of HS, including:
  - a. Ensure data collected by all Non-Governmental Organizations has the same uniformity and covers minimum data requirements that are appropriate and can be integrated with e-BRPL;

- b. Submission of data on the basis of the e-BRPL (port sampling) form, observer and fishing logbook, at the latest 4 March each year via email sdi.djpt@yahoo.com and harvesttuna@gmail.com. Quarterly data preparation workshops are recommended to be held consistently;
    - c. Preparation of socio-economic data form standards and collection of socio-economic data;
    - d. Complete inputting of regional vessel data in SIMKADA and registration of vessels that catch tuna in Indonesian waters (DIVA-TUNA) to improve accountability in the management of tuna, skipjack and tuna fishing.
2. Recommends that 5 (five) management action options can continue to be implemented taking into account the characteristics of fisheries and the needs of stakeholders in each region, with further recommendations as follows:
  - 2.1 Option 1, namely Controlling the Use of FADs, recommends that the Government immediately review the provisions on the placement and use and FADs for fishing business, with the main points of regulation, including:
    - a. Licensing and supervision authority of the Government and regional government,
    - b. Potential installation of FADs,
    - c. Specifications and conditions for FAD installation, and
    - d. Ownership and Utilization, including regulating the use of FADs by and on fishermen.
  - 2.2 Option 2, namely Closing of Catching Areas, recommends that the Government reviews the ban on fishing in FMA 714 so that it can provide effective results to protect spawning tuna resources (breeding and spawning), with the following regulatory issues:
    - a. Immediately follow up on the results of the Ministerial Evaluation Meeting No. 04 / PERMEN-KP / 2015 concerning The Prohibition of Fishing in the Territory of the Republic of Indonesia 714 Fisheries Management Area which was carried out on September 12<sup>th</sup>, 2019, where 3 (three) recommendations have been agreed e.g the exclusion of "Small Fishermen" in Maluku Province from the prohibition provisions as stipulated by the Ministerial Regulation,
    - b. Thought of expanding the area of closure can be done after there is a comprehensive study and adjusted to the provisions that have been applied so as not to cause problems for small-scale fisheries, especially small fishermen.
  - 2.3 Option 3, i.e. Controlling the number of days of operation requires further comprehensive review before being determined.

**2.4 Option 4, Controlling the number of fishing vessels, recommends proposing to the Government:**

- a. Regarding the limitation on the number of central permit vessels operating in FMA 713, 714 and 715 to continue and ships with size >100 GT still operating in the archipelagic waters are pushed to Indonesia EEZ. It is further recommend that this agreement should be formalized in a provision or regulation issued by the Government.
- b. To issue measure on controlling the number of regional fishing permits that catch tuna in FMA 713, 714 & 715, however this ought be done after a comprehensive study. This is so that the condition of skipjack tuna and yellowfin tuna (Yellowfin Tuna) which in 2017 is slightly above the Limit Reference Point can continue to show indications of improved stock status.
- c. Need to improve data collection for small-scale fishing vessels.

**2.5 Option 5, control of catch level, recommends to the Government:**

- a. Continuously conducting studies to determine the Total Allowable Catch, including baseline efforts and baseline catches;
  - b. A limitation on catch needs to be done, especially in areas where the catch has a low quality, so that the value and quality of the catch can be improved and more can be exported.
  - c. It is necessary to immediately make a "National Strategy for Strengthening the Quality of Small Fish Catches" so that the value obtained can be further enhanced.
3. Recommends that a more comprehensive socio-economic study be conducted so that the results can be used, among others in determining the selection criteria for Harvest Control Rules and recommending further studies for market preference (Market Study).
4. Recommends that the development of tuna institutions should be carried out, either by building independent tuna institutions or by fortifying the institutional strengthening of the National Commission for the Study of Fish Resources, by adding elements in the fields of highly migratory fish resources, fish resource in fisheries management area (FMA) and inland water resources. Propose a change in PERMEN-KP No. 30/PERMEN-KP/2016 concerning the National Commission on the Study of Fish Resources, which includes changes in the definition, function and structure in the context of strengthening tuna management institutions, including in regional areas where Indonesia is a member of RFMO. The said institutional development is expected to accommodate the "Tuna Fisheries Joint Management Committee", as a tuna fisheries management consultation platform, which has been formed by the Provincial Government.

5. Recommend to continue the agreement and recommendation of the 1<sup>st</sup> Stakeholder Meeting in 2018 which is still possible, a.l. socialization of the results of stakeholder meetings to the regions in FMA 713, 714 and 715 and public consultation on new rules to be revised (regional input is needed).

**Bogor, October 31<sup>st</sup>, 2019**

**Signed**

**Participants of 2<sup>nd</sup> Stakeholder Meeting**