**SUMMARY AND RECOMMENDATION**

**Workshop on Harvest Strategy Implementation for Tuna Fisheries**

**In FMA 713, 714 and 715**

**Bogor, 22 – 23 November 2018**

1. **SUMMARY**
2. Development of harvest strategies (HS) has been carried out through various activities such as stakeholder workshops, technical data workshops, expert consultations and training since 2014 with the result of the Harvest Strategy Framework, which was launched at the 3rd Bali Tuna Conference in 2018. Harvest Strategy Framework provides a basis for the further refinement and implementation of harvesting strategies for tuna in the Indonesia Fisheries Management Area (IFMA) 713, 714 and 715.
3. The input monitoring data for the prototype HS are based on specific port-based monitoring of catch and effort and size composition of the catches of selected gears (CFR-WPEA, MDPI, CFR-CSIRO(ACIAR)). These series were selected based on the length of the time-series, coverage of the area and the consistency of the data collection. The HS development process has identified important improvements for these monitoring data and for other monitoring series that may be available in the future.
4. Based on the management measures selection process by stakeholders on the 4th and 6th stakeholder workshop, 5 (five) general forms of management measures were identified for use in the refinement of HS. These 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.
5. A prototype Operating Model (OM) has been successfully built to test and review the performance of preliminary HS for the skipjack and yellowfin tuna fisheries to demonstrate concept of HS and MSE to stakeholders. The OM use output from the regional stock assessments conducted by SPC for the WCPFC to provide a “test-bed” for potential HS for IAW. The current OM includes selectivity from Indonesian port-based monitoring data. It was noted that these analyses should be updated to include additional 2016 - 2018 time series data is needed to improve OM representation of the Indonesian fisheries.
6. Required activities for HS implementation include improving HS specifications based on technical evaluation; designing specific management measures for inclusion in the HS, in consultation with stakeholders; completing the MSE process to identify preferred HS; updating the monitoring framework for data collection, legalizing the HS framework required for implementation, revising NTMP for 2020-2024 by including the implementation of HS and Harvest Control Rules (HCR), catch controls in each area of fishery.
7. One of the outputs of the HS stakeholder meeting is a suggestion to describe the response on what policies should be provide for each HS tested by OM, including translating them into the policies or activities of each institution: central government, local government, NGOs, associations, and fishing industries.
8. The work relations of IFMA management council with HS are important, especially for Local Governments, including the increasing role of management council of each IFMA in determining the control of tuna utilization.
9. **RECOMMENDATION**
10. To carry out meetings related to the implementation of HS in each IFMA location with the aim of:
11. Increasing stakeholders' understanding of HS;
12. 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.
13. All parties agree to implement or support the implementation of data collection which is the main input for the implementation of HS, including:
14. Adding 2016-2018 data based on agreed form, particularly on catch landings data and operational data on fishing.
15. The deadline for submitting data to HS Technical Team on March 4, 2019, send it to sdi.djpt@yahoo.com and harvesttuna@gmail.com.
16. 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.
17. To implement tuna allocation criteria for each FMA and fisheries according to the principle of sustainability, fairness and compliance with fisheries.
18. 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.
19. 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.
20. 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.
21. 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.
22. 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.
23. 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.
24. 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 for 2020-2024.
25. 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.
26. 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.