

Minimum standards and formats to optimize and harmonize the collection of data on FADs and definition of systems to accurately quantify numbers of FADs and active buoys

At the first meeting of the Joint tuna RFMO FAD working group in 2017, the Chair concluded that “to date, although management plans have been adopted in several t-RFMOs allowing for a better monitoring and data collection on FADs associated fisheries, there is still lack of sufficient information and data on FADs. It would, however, appear that some progress has been made since 2017 and that several RFMOs are making efforts to improve their FAD data collection systems. This includes the development or modification of data collection forms, or the adoption of new measures to improve the collection of FAD related data.

IATTC

In the eastern Pacific Ocean, during the 92nd meeting of the IATTC in July 2017, a new resolution (C-17-02) on conservation measures for tropical tunas was adopted that includes new measures for the fishery on fish-aggregating devices (FADs), including limits on the number of active FADs per vessel. Paragraph 11 of the resolution requires CPCs to “report, or require their vessels to report, daily information on all active FADs to the Secretariat”, at monthly intervals, “with a time delay of at least 60 days, but no longer than 90 days”, and paragraph 12 tasks the IATTC scientific staff and the Ad Hoc Permanent Working Group on FADs with developing, “at the latest by 30 November 2017, guidance on the reporting of FAD data in accordance with Paragraphs 10 and 11 of this Resolution, including the format and specific data to be reported”.

The IATTC have adopted the use of a new FAD form (aka Skippers' FAD logbooks in other oceans) to allow fishing crews to record buoy changes appropriately. This is an excel file which contains tables with buoy codes to standardize buoy ID collection. In addition, a new ROF (Floating object form) to be used by IATTC observers and national programs. The observer form has also been modified to incorporate buoy changes and be consistent with skippers FAD form, among other changes. Lastly Buoy data under Resolution C-17-02 has been reported during 2018 in, at least, 3 formats: "raw" (i.e. one position per day), INF1 and INF2. The reporting format varies between CPCs and/or fishing companies. This is a common issue that makes it a little harder to meet the objective of standardising and harmonising the collection of FAD data.

ICCAT

Since 2015 ICCAT has requested the collection of FAD data using form ST08 regarding FAD deployments, but has noted that to date, very few CPCs have submitted the information using these forms. Initially it was noted that CPCs were having problems in using the developed forms, which had been altered in light of new management recommendations (changes from 2015 to 2016). These problems relate to both the complexity of the forms, as well as doubts with regards to interpreting the requirements in Rec. [16- 01], particularly with regards to which data is required at which resolution (1 x 1, monthly etc.). These issues were investigated and discussed by the ICCAT Tropical Tunas Working Group and the Sub-Committee on Statistics in order to modify and clarify the forms for ease of use. As a result, New ST08a and ST08b forms for data reporting on FADs and buoys were proposed, replacing the ST08 currently used (2018a version). In addition, the ICCAT SCRS proposed the best standards for data collection included in the document SCRS/2018/159 to be considered as a minimum standard for FAD/buoy data collection. Form ST08a is proposed to report information on buoy densities, which can be extracted from buoy transmission information, while Form ST08b is designed to collect activities on FADs (based on the categories defined in Recommendation 16-01) which are extracted from the FAD logbooks.

IOTC

IOTC Resolution 18/08 – “Procedures on a fish aggregating devices (FADs) management plan, including a limitation on the number of FADs, more detailed specifications of catch reporting from FAD sets, and the development of improved FAD designs to reduce the incidence of entanglement of non-target species was adopted in May 2018 and among its objectives it provided details about FAD data collection, management plans and reporting requirements (in combination with IOTC Resolution 15/02 – “Mandatory statistical reporting requirements for IOTC Contracting Parties and Cooperating non-Contracting Parties (CPCs)”).

Data reporting requirements were eventually captured by IOTC Form 3FA_01 whose purpose is to provide a convenient data reporting template for all core FAD information as per the Resolutions above. Its current structure represents a trade-off between the complexity inherent in the nature of the information set and the need for a data reporting template that is simple and flexible enough to be efficiently adopted by CPCs. As in ICCAT, there were some issues with the complexity and understanding of the requirements of Form 3FA_01 to address the FAD/buoy data requirement in Res. 18/08 and Res 15/02. In particular, related to resolution of data requirements and different types of activity. In 2018 a paper to the WPDCS was presented (IOTC-2018-WPDCS14-39) which provides a global analysis of the major issues preventing a proper standardization of FOB data collection and reporting across all tRFMOs, and the possible identification of best global standards on data collection.

IOTC WPDCS noted the differences in classification and reporting requirements between this proposal and the existing IOTC classifications and 3FA_01 form and, as harmonization of terminology and data collection/reporting requirements for FOB and instrumented buoys is addressed during the forthcoming joint tuna RFMOs FAD working group, IOTC SC has requested that the outcomes from this working group be considered and further discussed by the IOTC Secretariat and the scientific community to improve and rationalize IOTC FOB and instrumented buoys terminology and data collection/reporting requirements and fully enable a science based approach to FOB management.

WCPFC

At its 1st meeting in Bali, Indonesia in November 2015, the FAD Management Options – Intersessional Working Group (FADMgmtOptions-IWG) recommended that: vessel operators provide data on FADs covering 2 major areas: (a). FAD design and construction of FAD to be deployed or encountered (materials, electronics, size etc.) (b). FAD activity (deploying, retrieving, setting, visiting, loss etc.) and that data collected by observers on FADs can be used for verification of FAD activities of vessels. At this stage it appears that no clear data reporting format has been decided and no data collection forms are available for this purpose.

Conclusions

It is clear that RFMOs are making efforts to collect data on FAD operations. However, these efforts are still progressing as many of the data collection forms are still being modified or fine-tuned and there are still issues that reduce the amount of data being submitted to RFMOs on FADs. This is an issue that the joint Tuna RFMO FAD WG may be able to ease. A clear list of minimum standards would guide RFMOs in being able to strengthen their data collection mechanisms. These issues are cross cutting and common to all oceans and therefore the increased capacity and expertise available at a joint Tuna RFMO level will enable some of the stumbling blocks and complications in the individual data collection mechanisms to be rationally discussed and resolved. In addition, many of the key players who are reporting FAD data are common across the various Oceans and a standardised format will greatly ease their workloads to report FAD data to the various Commissions. Data collection forms such as the new IATTC ROF, ST08 at ICCAT and 3FA_01 at IOTC could be compared and contrasted to look for commonalities and used to supplement each other's strengths and weaknesses in order to develop a consistent data collection mechanism across all oceans.