
IOTC-OFCF Project for strengthening and improving statistical systems for tuna resources in the Indian Ocean activities: Phase IV progress report

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BACKGROUND

The Memorandum of Understanding between the IOTC and the Overseas Fishery Cooperation Foundation of Japan (OFCF) was initiated in April 2002, to provide technical guidance for Projects to assist developing countries in the Indian Ocean region to improve the data collection and quality of fisheries statistics. Phases I (April 2002 - March 2007) and II (June 2007 - March 2010) and Phase III (June 2010 - March 2013) of the Project ran for over ten consecutive years.

Phase IV was initiated in June 2013 and continues the overall objectives and delivery mechanisms of previous phases of the Project, contributing to the realization of sustainable utilization of tuna resources by improving the accuracy of data collection and statistical analysis of the catch and resources of tuna in the Indian Ocean, with a particular emphasis on coastal countries, *including a number of states which are important in terms of contribution of catches of IOTC neritic species: Indonesia, Malaysia and Thailand.*

At the end of Phase III of the Project, the IOTC and the OFCF considered the implementation of a new Phase with the objective of continuing to address the concerns of the Commission regarding the quality of the data available for some of the important artisanal fisheries in the region. Following consideration of the proposal, the OFCF agreed to initiate Phase IV of the Project and allocate funds at a similar level to those of Phase III of the Project.

IOTC-OFCF PROJECT PHASE IV

The Memorandum of Understanding (MOU) initiating Phase IV between the IOTC and the OFCF was signed in June 2013, along the lines of Phase III, including the provision of funds and detachment of an OFCF Expert to the IOTC Secretariat to coordinate the activities of the Project, along with other staff from the Data Section of the IOTC Secretariat, as required. The duration of Phase IV of the Project is three years, until March 2016, with funds committed for each year and extension of the Project agreed through exchange of letters between the IOTC and the OFCF.

The Project has maintained the following three main principles since the Project inception in 2002:

- The activities undertaken under the Project follow the recommendations of the Commission and its relevant subsidiary bodies: the Working Parties and the Scientific Committee.
- There will be no direct financial implications for IOTC Member countries.

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- The activities of the Project should be directed towards reinforcing the statistical systems of developing countries from the region.

Core activities for Phase IV of the IOTC-OFCF Project as identified by the IOTC Secretariat, include:

- Indonesia: Follow-up mission to review catch monitoring activities on longliners flagged in Indonesia, including catches of albacore, port sampling activities for catch and length, and logbook system. Provide assistance to data processing for data collected from the longline fishery, in particular length frequency data, which Indonesia has not reported to the IOTC Secretariat since 2010. Assist in the preparation of data and procedures to facilitate reporting in the future.
- Indonesia: Data collection and data management workshops in Indonesia.
- Indonesia: Pilot sampling project to assist Indonesia in the implementation of provisions of the IOTC Regional Observer Scheme for artisanal fisheries and compliance with IOTC Data Requirements.
- Data mining of neritic tunas: Review of catch-and-effort data collected from the coastal purse seine fisheries operated in Malaysia and Thailand and actions required to improve the quality of the data collected from those fisheries.

The attached appendices provide a summary of the activities completed in Phase IV Year 1 of the IOTC-OFCF Project, as well as an overview of activities planned for Phase IV Year 2.

APPENDIX 1. SUMMARY OF PHASE IV COMPLETED ACTIVITIES: YEAR 1 (JUNE 2013 – MARCH 2014)**Activity 1: Appraisal of data collection and processing of longline fisheries in Indonesia**

Overview: Address recommendations from the Commission and IOTC Scientific Committee to assess the status of data collection and reporting of the longline fishery in specific ports in the Indian Ocean region of Indonesia and to prepare a report to highlight issues, and suggest ways to IOTC-OFCF on how to improve the sampling of this fishery. Specifically:

1. Carry out fact-finding missions to fishing ports in Indonesia, Indian Ocean side, including Muara Baru (Jakarta), Cilacap (Java), Palabuhan Ratu (Java), Denpasar (Bali), and Bungus (Sumatra), to assess the situation regarding data collection and reporting systems for longline fisheries, in particular fisheries for IOTC species, or species of pelagic sharks.
2. Prepare reports on the status of data collection and reporting systems in each port, using the information collected through the above missions.
3. Recommend actions to strengthen data collection, management, and reporting activities in each port, in order to ensure compliance with the levels of sampling coverage for effort and size recommended by the IOTC. This shall include, where required:
 - a. Documentation of the new sampling protocols and procedures recommended.
 - b. Estimate any additional costs associated to the implementation of the above activities.

Evaluation: Achieved

Main outputs and improvements:

1. Identification of gaps in data collection for some catch components and ports
2. Written report submitted to the Directorate General of Capture Fisheries (DGCF), Indonesia, with recommendations on actions required in each of the selected ports to improve future data collection and processing of data from longline vessels.

Activity 2: INDONESIA (West Sumatra province) – Data collection workshop

Overview: Support the implementation of capacity building activities in several Provinces in Indonesia, in coordination with the DGCF and the Provincial authorities concerned, via activities including

1. fact-finding missions to assess the status of data collection and management in selected Provinces;
2. organization of Data Collection and Data Management Workshops in each Province;
3. follow-up of activities, to assess the status of implementation of recommendations following each Workshop.

The Data Collection Workshop of West Sumatra was the first workshop organized with the support of the IOTC-OFCF Project.

Evaluation: Achieved

Main outputs and areas of improvements

1. Delivery of workshop to 34 participants, including enumerators, data input staff, supervisors, and staff from the DGCF Headquarters and Research Center for Fisheries Management and Conservation in Jakarta.
2. Pre and post-workshop reports summarizing issues concerning the status of data collection, processing, and dissemination for the fisheries catching IOTC species in West Sumatra, in particular: inconsistent use of the DGCF Forms; misreporting of catches for some species, such as longtail tuna; lack of sampling of catches at the landing place; insufficient training and supervision of enumerators; very poor species identification skills by enumerators; insufficient data management and validation; and need to revise the catch series for West Sumatra.
3. The workshop and reports also identified a range of actions that could be implemented to address the issues identified, and stressed the need for the DGCF to address some of the issues as a matter of priority.

The Workshop noted that the DGCF may require assistance in the implementation of some of the recommendations from the workshop, and encouraged the continuation of advice and support from the IOTC-OFCF Project, or other agencies, in the strengthening of data collection and processing activities in Indonesia.

Activity 3: MALAYSIA & THAILAND – Data mining of neritic tunas (January 2014)

Overview: A number of IOTC Contracting Parties, including Thailand and to a lesser extent Malaysia, have collected large data sets on neritic tuna species, but have either not reported data to the IOTC according to standards set by Resolution 10/02 or have not assessed the value of using the data collected to estimate indices of abundance for neritic tuna species. The mission directly addresses previous recommendations of the IOTC Working Party on Neritic Tunas, and Plan of Work agreed by the WPNT:

1. Assess the status of data on nominal catch statistics, catch-and-effort, and size frequency reported by Malaysia and Thailand, and conduct a comprehensive assessment of official and alternative data sources held by the national fisheries organizations, in particular the use of alternative datasets to facilitate the estimation of indices of abundance.
2. Assess the value of using the available datasets to derive nominal CPUE for the species of neritic tunas that are the target of these fisheries, and the use of this information in the estimation of indices of abundance for such species.
3. Provide assistance to the national fisheries organizations (Department of Fisheries (DoF) and Fisheries Research Institute (FRI)) in the compilation, processing of data and provision of data series of catch-and-effort and size data to the IOTC Working Party on Neritic Tunas to be used in future assessments of these species.
4. Evaluate the data collection systems, validation and reporting of catch-and-effort and size data from coastal purse seine fisheries directed at species of neritic tunas in each country.

Evaluation: Partly achieved (visit to Thailand postponed until Phase IV Year 2)

Main outputs and areas of improvement (Malaysia only)

1. Post-mission report provided to DoF and DFRI with recommendations on improvements in future data collection and reporting of data (e.g., monitoring of FADs, standardization of CPUE data series).
2. Improved compliance by Malaysia in terms of IOTC data requirements (Resolution 10/02). Agreement reached in terms on reporting standards of nominal catch and catch-and-effort for neritic tunas, and submission of size-frequency data.
3. Harmonization of nominal catch and catch-and-effort published by Malaysia and IOTC Secretariat; quality assurance of the catch series.
4. Commitment from Malaysia and IOTC Secretariat to co-author two papers for the Working Party on Neritic Tunas/Data Collection and Statistics related to the mission findings (i. Revision of the historical nominal catch series, and ii. Standardization of the CPUE series).

APPENDIX 2. SUMMARY OF PHASE IV PLANNED ACTIVITIES: YEAR 2 (APRIL 2014 – MARCH 2015)**Activity 1. INDONESIA – Data Collection Workshop for the DGCF and Provincial Authorities in Bali and Jawa Timur (mid-September 2014)**

Overview: Support the DGCF to review the status of data collection and quality of catch statistics in Bali and Jawa Timur provinces, in particular the collection of fisheries data from oceanic ports and other important landing places, with a focus on catches of juvenile tropical tunas and neritic tuna species. Provide training on sampling techniques and the identification of tuna, tuna-like species and main species of pelagic sharks by enumerators.

Outcome: Strengthening of expertise of enumerators in Bali and Jawa Timur in data collection, validation, and reporting of fisheries data to the IOTC Secretariat by Indonesia. Identify issues related to data collection specific to Bali and neighbouring provinces and actions required to address those issues in terms of capacity-building activities that the IOTC-OFCF Project could implement in the future.

Activity 2. INDONESIA – Pilot Project sampling artisanal fisheries (June 2014 – March 2015)

Overview: Support the DGCF on the implementation of a Pilot Project, in collaboration with Bay of Bengal Large Marine Ecosystems Project, in the Provinces of West Sumatra and North Sumatra to monitor the activities of coastal fisheries in selected landing locations. The data collection system is currently based on reports from the fishing sector (e.g. sale slips), which are not validated by the authorities. The lack of independent sampling is of concern and has led to overspread misreporting of catches of some species and gear for the two provinces, where catches account for around 20% of catches of IOTC species across provinces in Indonesia facing the Indian Ocean.

Outcome: Test and propose a new cost effective sampling strategy that will allow Indonesia to comply with national and international fisheries data reporting requirements. Review the catch series for the coastal fisheries of Indonesia on the basis of sampling results obtained, and draft recommendations for future actions to be implemented by DGCF or additional capacity building activities for the IOTC-OFCF Project.

Activity 3. INDONESIA – Technical guidance and assistance to improve reporting of data at the DGCF (November 2014)

Overview: Provide assistance DGCF to data processing for data collected from the longline fishery, in particular length frequency data, which Indonesia has not reported since 2010. The proposal is to send an IOTC Officer to Indonesia to assist the DGCF in the preparation of datasets and procedures to facilitate reporting of data to the IOTC Secretariat in the future.

Outcome: Improve the compliance of Indonesia in terms of IOTC Resolution 10/02; submission of data to enable the Working Parties to help develop stock status indicators and increase the amount of data available for comprehensive stock assessments of IOTC species in the future.

Activity 4. THAILAND – Data mining of neritic tunas (June 2014)

Overview: Assist the Department of Fisheries, Thailand in reviewing the catch-and-effort data and completeness of datasets reported by Thailand fisheries to the IOTC Secretariat, and identify actions to improve the quality of the data collected to facilitate the estimation of abundance indices for neritic tuna species and its use in the assessments of IOTC species of relevance to the Working Party on Neritic Tunas.

Outcome: Revised catch-and-effort of kawakawa and longtail tuna for the coastal purse seine fisheries for Thailand; recommendations concerning additional information to be collected in the future to improve any abundance estimates derived from these datasets, and capacity building activities to be implemented by the IOTC-OFCF Project in the future.

Activity 5: SEYCHELLES – Assistance to the activities of Scientific Observer Programme implemented by Seychelles Fishing Authority

Overview: In July 2013, Seychelles Fishing Authority (SFA) began implementation of a Scientific Observer Programme for the industrial tuna fishing fleet, according to the requirements of the IOTC Resolution 11/04 Regional Observer Scheme. A request was received from SFA to the IOTC-OFCF Project Manager in March 2014 to provide materials to support the expansion of the Observer Programme; specifically the supply of 15 calipers to be used by observers to collect length frequency measurements of by-catch species. Technical assistance and guidance will be provided on how to use calipers and to improve the quality of length frequency data as a result of assistance by the Project.

Outcome: Provision of calipers to SFA; improvement in the quality and quantity of size-frequency data collected by Scientific Observers and reported to the IOTC Secretariat to help improve the statistical base of future assessment.