
IOTC CAPACITY BUILDING ACTIVITIES IN SUPPORT OF DEVELOPING COASTAL IOTC CPCs: 2016 ACTIVITIES

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Purpose

To provide the IOTC Working Party on Data Collection and Statistics with an overview of the activities that, independently or along with other partners, the IOTC Secretariat initiated during the last year in support of developing coastal states, and the main results of those activities.

Background

Since its inception the Commission has allocated funds from its regular budget to assist developing coastal CPCs in the Indian Ocean in the implementation of the IOTC data requirements. In addition to the funds allocated by the Commission, the IOTC Secretariat has also secured funding from external sources; in recent years, funds sourced from third parties have been well above those allocated by the Commission.

Since April 2002, the Overseas Fisheries Cooperation Foundation of Japan has been assisting developing coastal states in the IOTC Area of Competence with their statistical data collection, processing, and reporting systems, with a view to enhancing the capacity of institutions in those countries and improve their compliance with IOTC requirements for statistics and other scientific data used on the assessments of IOTC species. In recent years, the IOTC has also received substantial funding for capacity building activities from other sources, in particular the Bay of Bengal Large Marine Ecosystems Project (BOBLME), the IOC-SmartFish Project and, more recently, the GEF-Areas Beyond National Jurisdiction Project (ABNJ), and EU DG-Mare.

This document presents the activities undertaken by the IOTC and its partners during the last year (2016), including those activities that will extend to 2016 and following years, where appropriate.

Recommendation

The WPDCS is invited to review the Progress of activities undertaken by the IOTC and its partners and recommend that the IOTC Scientific Committee considers to endorse the future work plan by the IOTC Secretariat. In addition, the WPDCS is invited to consider, where necessary, recommending the implementation of other activities that to its view will lead to improved statistics for IOTC and associated species, including identification of agencies that may be prepared to fund such activities.

The report covers the following areas:

- [Introduction](#)
- [Summary of countries and activities undertaken in 2016](#)
- [Activities planned for 2017 and following years \(where applicable\)](#)

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Introduction

Table 1 presents the Capacity Building activities that the IOTC and its partners implemented during 2016 to assist developing coastal CPCs in the Indian Ocean, by country and type of activity; and the levels of funding allocated to each activity.

Activity	Executing Agencies	Funding Agency
Feb 2016: Tanzania Data compliance and support mission.	IOTC Secretariat	IOTC Secretariat EU (DG Mare)
August 2016: Mauritius 1. Data compliance and support mission. 2. Assessment of the feasibility of collecting size and biological data unloadings of foreign longline vessels unloading in Port Louis, Mauritius.	IOTC Secretariat	IOTC Secretariat EU (DG Mare)
October 2016: Indonesia 1. Continuation of support for the IOTC/OFCF/BOBLME pilot sampling of artisanal fisheries. 2. Data compliance mission to facilitate the reporting of catch-and-effort and size data from industrial longline fleet.	IOTC Secretariat, OFCF	IOTC-OFCF Project
June–Dec 2016: Regional Observer Scheme E-Reporting interface Development of an ROS electronic interface for data entry, integrated with national and regional ROS database	IOTC Secretariat / IOTC consultant, WWF	IOTC Secretariat EU (DG Mare) NOAA (administered via WWF)
Sept-2016 to June-2017: Sports and recreational fisheries project Improve the acquisition of catch and effort, and size data from Sports and recreational fisheries in the Western Indian Ocean	IOTC Secretariat / IOTC consultant, African Billfish Foundation	IOTC Secretariat EU (DG Mare)

Funding Agencies

The following section includes a description of the main agencies that contributed funds and other support to IOTC data capacity building during 2016:

IOTC: The Indian Ocean Tuna Commission allocates funds from its regular budget to the implementation of capacity building activities in developing coastal states that are IOTC CPCs. The Data and Statistics Section of the IOTC Secretariat were involved in one or more of the capacity building activities referred to in Table 1.

IOTC-OFCF Project²: The Memorandum of Understanding between the IOTC and the Overseas Fishery Cooperation Foundation of Japan (OFCF) was initiated in April 2002, with the purpose of enhancing the capacity of developing coastal states in the Indian Ocean region to improve their fisheries statistical systems. Phases I (April 2002 - March 2007), II (June 2007 - March 2010) and III (June 2010 – March 2013) of the Project ran for eleven consecutive years. At the end of Phase III of the Project, the IOTC and the OFCF considered the

² <http://www.iotc.org/data/iotc-ofcf>

implementation of a new Phase with the objective of addressing the concerns of the Commission regarding the quality of the data available for some of the important artisanal fisheries in the IOTC Region. Following consideration of the proposal, the OFCF agreed to initiate Phase IV of the Project, which involved the allocation of similar levels of funds to those allocated to Phase III of the Project. Phase IV of the IOTC-OCF Project focus on the implementation of activities in support of IOTC coastal countries, with a view to strengthening their capacity to comply with provisions in IOTC Resolution 11/04 (Regional Observer Scheme), and a focus on artisanal fisheries. In particular, the Project assists countries to facilitate compliance with the minimum sampling levels recommended by the Commission for artisanal fisheries:

[Res.11/04, para 4.] The number of the artisanal fishing vessels landings shall also be monitored at the landing place by field samplers. The indicative level of the coverage of the artisanal fishing vessels should progressively increase towards 5% of the total levels of vessel activity (i.e. total number of vessel trips or total number of vessels active).

A new Memorandum of Understanding (MOU) between the IOTC and the OFCF was signed in June 2014, along the lines of those previously existing, including the provision of the OFCF Project Manager to accompany the IOTC Secretariat on Project missions, and coordinate the activities of the Project, along with staff of the IOTC Secretariat, as required. Phase IV formally ended in March 2016, and extension to Phase IV was granted until March-2017 to utilize residual funds available to the Project. Activities under the IOTC-OCF Project are reviewed annually, and funds for a new year committed on the basis of results from the Project and mutual agreement by the parties on the continuation of activities, through exchange of letters between the IOTC and the OFCF.

The Project has kept the following three main principles since 2002:

- i. The activities undertaken under the Project follow the recommendations of the IOTC Commission and its relevant subsidiary bodies: the Working Parties and the Scientific Committee.
- ii. There will be no direct financial implications for IOTC Member countries.
- iii. The activities of the Project should be directed towards reinforcing the statistical systems of developing countries from the region.

European Commission – DG for Maritime Affairs & Fisheries (DG MARE)

The mission of the Directorate-General for Maritime Affairs and Fisheries is:

"To develop the potential of the European maritime economy and to secure sustainable fisheries, a stable supply of seafood, healthy seas and prosperous coastal communities – for today's Europeans and for future generations."

Since 2015, DG-MARE has provided the IOTC Secretariat a capacity building grant to fund projects that foster compliance of Conservation and Management Measures (CMMs), in addition to technical assistance to developing countries in the IOTC area to improve the implementation of the at-sea observer scheme and data collection, data compliance and support missions to CPCs, FADs Working Group and support to science meetings.

Funding was utilized to support some of the initiatives detailed in activities conducted in 2016, including:

- Data compliance and support missions to CPCs, to assess understanding of the IOTC Data Requirements and how lack of data affects the quality of the scientific advice produced by the IOTC; assess current shortcomings concerning the collection and management of fisheries data, and whether additional assistance is required to implement those actions; agree a plan of action with the CPC required to deliver improvements on the levels of reporting.
- Support for the implementation of the Regional Observer Scheme through the pilot trial and roll-out of an electronic data reporting and management system to facilitate data capture, processing, reporting and management in developing country CPCs. This activity aims to support CPCs in improving the quality and timeliness of data reported according to Resolution 11/04.

ABNJ Project³: The Global sustainable fisheries management and biodiversity conservation in the Areas Beyond National Jurisdiction (ABNJ) Program promotes efficient and sustainable management of fisheries resources and biodiversity conservation in the ABNJ.

The 5-year ABNJ Program is comprised of 4 projects. In particular, the Sustainable Management of Tuna Fisheries and Biodiversity Conservation in the ABNJ pilots Rights-Based Management systems and other sustainable fishing practices; reduces illegal, unreported and unregulated (IUU) fishing; and reduces bycatch and other adverse ecosystem impacts on biodiversity.

The IOTC is among the five tuna regional fisheries management organizations that is receiving support from the ABNJ Project.

Summary of countries and activities undertaken in 2016

Despite a number of vacant posts at the IOTC Secretariat throughout 2016⁴, the IOTC Data Section has still delivered a number of capacity building activities in support of priorities identified by the IOTC Working Parties and Scientific Committee.

The following capacity building activities were implemented by the IOTC and its partners in 2015-2016 (up to end-October 2016):

1. Indonesia: Pilot sampling activities of artisanal fisheries in North and West Sumatra

In recent years Indonesia has ranked first in terms of catch of IOTC species and pelagic species of sharks in the Indian Ocean, accounting for around 20% of total catches of IOTC species, of which the majority of catches are accounted for by coastal fisheries. Within Indonesia, West Sumatra and North Sumatra have important coastal fisheries while catches of longliners are recorded in the only fishing port, Bungus (West Sumatra). However a number of concerns have been raised by the IOTC Scientific Committee regarding the lack of sampling of artisanal fisheries, as well as large fluctuations in annual catches and catch-by-species reported by Indonesia.

³ <http://www.thegef.org/gef/ABNJ>

⁴ E.g., Executive Secretary, Deputy Secretary, Data Coordinator (up to March 2016), and Stock Assessment Officer (up to November 2016).

Pilot sampling activities of coastal fisheries in West and North Sumatra were initiated following a request for assistance from the Directorate General of Capture Fisheries of Indonesia. Sampling began in June 2014 thanks to the support provided by the Bay of Bengal large Marine Ecosystems Project (BOBLME), the Overseas Fisheries Cooperation Foundation (OFCF), the IOTC Secretariat, the DGCF, and Provincial Authorities of West Sumatra and North Sumatra.

The objectives of the Project are threefold:

- (i.) To devise a collection and management strategy for fisheries data for coastal fisheries of Indonesia that is in line with national and international data requirements, in particular provisions of the IOTC Regional Observer Scheme, Minimum Data Requirements, and FAD Management Plans;
- (ii.) build capacity in Indonesia to ensure that the government of Indonesia has the ability to maintain the activities once that external support is discontinued;
- (iii.) to use the data collected during the Pilot Project to revise the time-series of catches for West Sumatra and North Sumatra, and facilitate reporting of this information to national and international institutions, as required.

The IOTC Secretariat coordinates all activities under the Project, while field activities are managed by the DGCF with the assistance of a consultant.

In 2016-17 the Project's activities focused on continuing support for the monitoring of sampling and evaluation of the data collected so far, including:

- follow-up monitoring visits to pilot landing sites to ensure the sampling protocols continue to be implemented correctly throughout 2016;
- evaluate the feasibility of extending sampling to additional landing sites and gears;
- PELAGO database training of DGCF staff in the extraction and analysis of the results of sampling. to enable the data to be reported to the IOTC Secretariat as part of the mandatory statistical requirements for coastal fisheries.

Project completion date: on-going throughout 2016 and 2017

2. Regional Observer Scheme: E-Reporting tool

The IOTC Regional Observer Scheme is a high priority for reducing the level of uncertainty associated with the status of many target stocks and associated bycatch species. However current low levels of reporting of ROS data to the IOTC Secretariat are confounded by ROS data returns which are often reported in non-electronic or un-standardised format, including .doc, .pdf or scanned documents, that are not easy to validate and compile in statistical databases.

The Project aims to facilitate improvements in the data capture, processing and timeliness of reporting of ROS data to the IOTC Secretariat by the development of electronic data entry interface, national database for storage and processing of data, and regional ROS database hosted by the IOTC Secretariat. E-reporting is now becoming increasingly mainstream as a method for collecting data, managing and processing for timely analysis. The

Project is targeted particularly at developing country CPCs which have not yet developed observer data collection and where data management processes and will be an important capacity building tool for these countries, and aims to deliver a fully integrated system from the point of data entry to transmission of the processed ROS data to the IOTC Secretariat.

Project estimated completion date: late-2017.

3. Sport fisheries data collection: pilot project

The project aims to improve the data reporting coverage of sports and recreational fisheries in the western Indian Ocean. The activities include compiling a directory of sport fishing centres in the western Indian Ocean region, development of a database and standardized reporting forms adapted to Sport Fishing Centres in the western Indian Ocean region, and deliver training materials to Sports Fishing Centres to improve the reporting of sports fisheries data to the IOTC Secretariat. While the data collection is focused largely on billfish species, sports and recreational fisheries are also important for catches of neritic tunas and tuna-like species – particularly for CPCs with fisheries in the Arabian Sea. CPC's selected for the pilot phase include: Kenya, La Réunion, Mauritius, and Seychelles.

Project estimated completion date: June-2017.

4. Support for size frequency and biological sampling of albacore tuna in Mauritius

Port Louis in Mauritius is one of the main landing places for albacore tuna in the Indian Ocean. A mission was conducted in August 2016 to address concerns from the IOTC Scientific Committee regarding the quality of size data for albacore available for the longline fleet of Taiwan, China. The objective of the mission was to assess the feasibility of collecting alternative length frequency data through sampling of lengths of albacore at the landing place by foreign fleets unloading in Mauritius. Following the mission, Mauritius agreed to provide the IOTC Secretariat with size data from foreign unloadings (licensed to fish within the EEZ of Mauritius), while discussions were held regarding longer term capacity building in relation to biological sampling of albacore to supplement the lack of biological information from the Indian Ocean in the current albacore stock assessments.

5. IOTC Data Compliance and Support missions

Data compliance and support missions are conducted by staff from the IOTC Secretariat, with the assistance of staff from the government institutions concerned in each country, and are focused on the following objectives:

- i.) Assess IOTC CPC compliance with IOTC Requirements for scientific data, including IOTC Species and other bycatch, and provisions for the collection of logbook data, implementation of the IOTC Regional Observer Scheme, and data requirements with regards to FAD management plans.
- ii.) Recommend the type of actions that will need to be undertaken to address any issues identified in (i).
- iii.) Agree on a Plan of Action to address any issues identified impending compliance with IOTC data related resolutions, including a time frame for the implementation of those actions and the type of indicators to be used in each case to assess progress.

During 2016, the following missions were carried out by staff of the IOTC Data Section:

- **Tanzania:** following a request from Tanzania in 2015 for assistance in reporting data to the IOTC Secretariat, including Regional Observer data, a mission was conducted in February 2016 and included an evaluation of current status of data reporting, list of recommendations and Plan of Action to improve future data compliance levels.
- **Mauritius:** a mission was conducted in August 2016, including an assessment of current gaps in Mauritius data collection (e.g., sampling of artisanal FAD fisheries, and sports fisheries). Following the mission, the IOTC Secretariat recommended Mauritius collaborate as one of the pilot countries for the current Sports and recreational fisheries project.
- **Indonesia:** Since 2012 Indonesia has collected (logbook) catch-and-effort (CE), and size frequency (SF) data from its longline fisheries. However, this information has not been reported to the IOTC. In November 2015, a data compliance and support mission was conducted in Indonesia to facilitate reporting of CE and SF information available in the format requested by the IOTC – including training of DGCF staff in the processing of data in the format required for submission of data to the IOTC. A follow-up mission was conducted in October 2016 has at providing further technical assistance in reporting of the datasets, which Indonesia now plan to begin routinely reporting to the IOTC Secretariat from 2017 onwards.

Activities planned for 2017

Below is a non-exhaustive list of the capacity building activities planned for late-2016/2017. Several of the activities have been postponed from 2016 due to resourcing issues at the IOTC Secretariat and the vacant position of the IOTC Data Coordinator (vacant until April 2016):

a) IOTC Data compliance and support Missions:

A number of additional data compliance and support mission have been provisionally budgeted for 2017, aimed at improving levels of data compliance of CPC's in the IOTC region and also to provide an the assessment of the status of current data collection and reporting systems.

At least two missions are planned for 2017, funded by the European Union (DG-Mare) and IOTC regular budget. Possible CPCs identified for 2017 include I.R. Iran, Pakistan, and Maldives.

b) **Assistance in Catch Assessment Survey of artisanal fisheries in Kenya:** In 2015, the IOTC Secretariat received a request from Kenya for assistance in the processing and analysis of results of a Catch Assessment Survey conducted for artisanal fisheries. In addition, Kenya also requested support in establishing an electronic data capture and storage system to reduce delays in the data capture and improve timeliness in reporting. Due to staff resourcing issues at the Secretariat, support for this activity has been postponed until 2017.

c) Regional Observer Scheme E-Reporting and E-monitoring pilot projects:

- **E-Reporting pilot Project:** 2017 will see the continuation of the ROS E-Reporting Project, including finalization of the electronic data reporting tool, and integration of the national and regional databases and commencement of pilot testing in 2 or 3 developing coastal CPCs (TBC).
- **E-monitoring pilot Project:** The Project is aimed at improving the quality of data and coverage of fisheries where there are practical difficulties placing regional observers on-board vessels (e.g., due to safety

issues, lack of space, logistics, etc.) – particularly in the case of the artisanal gillnet fleets. The proposal is to trial on-board cameras to monitor the species composition of catches and incidences of by-catch.

Implementation of the activities listed above are subject to final confirmation of support by the agencies concerned.