

---

**IOTC CAPACITY BUILDING ACTIVITIES IN SUPPORT OF DEVELOPING COASTAL  
IOTC CPCs: 2014 ACTIVITIES**

PREPARED BY: IOTC SECRETARIAT<sup>1</sup>, 19 NOVEMBER 2014

---

**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).

This document presents the activities undertaken by the IOTC and its partners during the last year, and those activities that will extend to 2015 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.

---

<sup>1</sup> For questions regarding the content of the report, contact:

Herrera, M ([secretariat@iotc.org](mailto:secretariat@iotc.org))

Bibliographic entry: Herrera, M., Sakonju, K., Martin, S. & Geehan, J. (IOTC Secretariat), 2014. IOTC capacity building activities in support of developing coastal IOTC CPCs: 2014 activities. Eden Island, Seychelles, 2-4 December 2014. *IOTC–2014–WPDCS10–08*.

The report covers the following areas:

- Introduction;
- Summary of countries and activities undertaken in 2014;
- Activities planned for 2015 and following years;

## Introduction

Table 1 presents the Capacity Building activities that the IOTC and its partners implemented during 2014 to assist developing coastal CPCs in the Indian Ocean, by country and type of activity; and the levels of funding allocated to each activity. Overall, during 2014 the IOTC spent 74,300 US\$ from its regular budget on capacity building activities<sup>2</sup> while 420,430 US\$ were allocated by other agencies.

**Table 1:** Capacity building activities implemented by the IOTC and its partners during 2013-14, including the institutions involved and levels of funding devoted to each activity

Activity	Executing Agencies	Funding Agency <sup>3</sup> (US\$)	Total Funding (US\$)
Oct 2013: Pilot sampling activities Madagascar	DNRH Madagascar, IOC-SmartFish (Consultants), IOTC Secretariat	SmartFish (50,000) IOTC (2,500)	52,500
Oct 2013: Support to data collection and management activities Comoros	CNRH Comoros, IOC-SmartFish, IOTC Secretariat	SmartFish (35,000) IOTC (2,500)	37,500
Nov 2013: Review of data collection and management systems longline fisheries of Indonesia	DGCF of Indonesia & IOTC Secretariat (Consultant)	OFCF (14,237)	14,237
Jan 2014: Support to data collection and data management activities in Sri Lanka	MFARD of Sri Lanka, BOBLME & IOTC Secretariat	BOBLME (30,000) IOTC (3,500)	33,500
Jan 2014: Data mining neritic tuna in Malaysia	FRI, DOF & IOTC-OFCF Project	OFCF (3,937) IOTC (3,500)	7,437
Feb 2014: Review of data collection and management systems artisanal fisheries of West Sumatra, Indonesia	DGCF of Indonesia & IOTC Secretariat (Consultant)	OFCF (13,531)	13,531
Feb 2014: Data collection Workshop West Sumatra Indonesia	DGCF of Indonesia & IOTC Secretariat	OFCF (18,387) IOTC (5,000)	23,387
Mar 2014: Workshop on Compliance with IOTC Data Requirements, Mauritius	IOTC Secretariat	SmartFish (60,000) BOBLME (10,746) IOTC (33,100)	103,846
May 2014: Review of data collection and management systems artisanal fisheries of Bali and East Java, Indonesia	DGCF of Indonesia & IOTC Secretariat (Consultant)	OFCF (6,163)	6,163
Jun 2014: Pilot sampling activities North and West Sumatra, Indonesia	DGCF of Indonesia & IOTC Secretariat (Consultant)	DGCF (4,000) IOTC (17,700) BOBLME (125,400) OFCF (25,140)	172,240

<sup>2</sup> Note that IOTC expenses include both staff salary costs and the amount allocated by the Commission to capacity building activities.

<sup>3</sup> *Ditto 2.* Amounts in *italics* represent rough estimates by the IOTC Secretariat and will be updated as soon as information is received from the agencies concerned. For OFCF the amounts refer only to the operating funds that the OFCF has allocated to capacity building activities and do not include those funds that the OFCF allocates to the OFCF Expert that manages the Project (*e.g.* salary), who is based at the IOTC Secretariat, in Seychelles.

**Table 1:** Capacity building activities implemented by the IOTC and its partners during 2013-14, including the institutions involved and levels of funding devoted to each activity

Activity	Executing Agencies	Funding Agency <sup>3</sup> (US\$)	Total Funding (US\$)
Jul 2014: Data Mining neritic tuna in Thailand	AFRDC, DOF & IOTC-OFCF Project	OFCF (5,573) IOTC (3,500)	9,073
Oct 2014: Data collection Workshop Bali & East Java Indonesia	DGCF of Indonesia & IOTC Secretariat	OFCF (18,316) IOTC (3,000)	21,316
		BOBLME (166,146) DGCF (4,000) IOTC (74,300) OFCF (105,284) SmartFish (145,000)	494,730

Following is a description of the agencies that contributed funds and other support to capacity building during 2014:

**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. In 2014, the IOTC Secretariat provided additional assistance to countries in the region, as requested by the Commission in paragraph 7 of IOTC Resolution 11/04:

*7. The sampling scheme referred in paragraph 4 will be covered by the Commission's accumulated funds and voluntary contribution on a provisional basis. The Commission will consider an alternative for the financing of this scheme.*

The three staff working at the Data and Statistics Section of the IOTC Secretariat were involved on one or more of the capacity building activities referred to in Table 1. The contribution of the IOTC has been estimated in terms of both the working time that IOTC staff spent on capacity building activities during 2014 (salary costs) and the amount used by the IOTC Secretariat from that allocated by the Commission to capacity building activities.

**IOTC-OFCF Project<sup>4</sup>:** 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 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-OFCF 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 assist countries to facilitate compliance with the minimum sampling levels recommended by the Commission for artisanal fisheries:

*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 2013, along the lines of those previously existing, including the provision of funds and detachment of an OFCF Expert to the IOTC Secretariat, to coordinate the activities of the Project, along with the IOTC Data Coordinator and other staff from the Secretariat, as required. Phase IV of the Project is now at the end of its second year and will come to an end in March 2016. Activities under Phase IV are reviewed annually, and funds for a new year committed on the basis of results

<sup>4</sup> <http://www.iotc.org/data/iotc-ofcf>

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 keeps the following three main principles since 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.
- The activities of the Project should be directed towards reinforcing the statistical systems of developing countries from the region.

The current report covers activities on the end of year one of Phase IV of the Project (January - March 2014)<sup>5</sup> and the second year of Phase IV (April-December 2014). A summary of all the activities undertaken by the Project since its inception in 2002 is also presented in Table 1 and in Annex 1.

**BOBLME Project**<sup>6</sup>: The Bay of Bengal Large Marine Ecosystem (BOBLME) Project is designed to improve the lives of the coastal populations of the Bay of Bengal (Maldives, India, Sri Lanka, Bangladesh, Myanmar, Thailand, Indonesia and Malaysia) through improved regional management of the Bay of Bengal environment and its fisheries. The BOBLME Project is funded principally by the Global Environmental Facility (GEF), Norway, the Swedish Internal Development Agency, FAO, participating Governments and the National Oceanic and Atmosphere Administration (NOAA).

Component 2 of the Project covers **Coastal and Marine Natural Resources Management and Sustainable Use**, towards development and implementation of regional and sub-regional collaborative approaches to common/shared issues affecting the health and status of BOBLME, including:

- 2.1. Community-based integrated coastal management - stock-taking/lesson learning of information and experience for promotion of community-based, fisheries and habitat management; co-management; and alternative livelihoods among fisher communities in the region
- 2.2. Improved policy harmonization – obtaining a better understanding of the policy processes and enhanced capacity in the formulation of policy, regional exchange of information on policy and legislation (inputs to SAP)
- 2.3. Collaborative regional fishery assessments and management plans – developing collaborative regional fishery assessments, regional and sub-regional management plans, and **harmonization of data collection and standardization to promote collaborative fisheries management approaches**
- 2.4. Collaborative critical habitat management - **promoting multi-national approaches to manage and address issues affecting transboundary coastal/marine ecosystems within the broader BOBLME region.**

Since the inception of the BOBLME Project, the BOBLME Project and the IOTC Secretariat have cooperated in the implementation of capacity building activities in countries participating in the BOBLME Project. As for fisheries data and statistics, the IOTC and the BOBLME agreed to implement joint activities to strengthen data collection and management systems for fisheries that target large-pelagic species, in particular species of pelagic sharks and tuna and tuna-like species.

**SmartFish Programme**<sup>7</sup>: SmartFish is one of the largest regional Programmes for fisheries in Africa covering 20 beneficiary countries in the Eastern, Southern Africa and the Indian Ocean (ESA-IO) region. Funded by the European Union and implemented by the Indian Ocean Commission (IOC) jointly with the Food and Agricultural Organization of the United Nations (FAO).

There are 20 beneficiary countries under the programme, including IOTCCPCs such as Comoros, Djibouti, Eritrea, Kenya, Madagascar, Mauritius, Seychelles, Somalia, Sudan, and the United Republic of Tanzania. In addition Mozambique, Reunion Island (EU), and South Africa are participating, although not as beneficiary countries.

The IOTC is among the regional fisheries management organizations the COI-SmartFish Programme cooperates with.

<sup>5</sup> Note that this refers to the Japanese fiscal year, which runs from April to March of the Julian calendar.

<sup>6</sup> [http://www.boblme.org/project\\_overview.html](http://www.boblme.org/project_overview.html)

<sup>7</sup> <http://commissionoceanindien.org/activites/smartfish/le-projet-project/a-propos-about-us/>

**ABNJ Project<sup>8</sup>:** 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 2014**

The following capacity building activities were implemented by the IOTC and its partners in 2013-14:

**Support to data collection and management activities in Comoros:** Comoros has important artisanal fisheries for tropical tunas. In 2012 the IOTC-OFCF Project conducted a training course on catch estimation, inviting two officers from the “Centre National de Ressources Halieutiques” (CNRH) of the Union of Comoros to the IOTC Secretariat (Seychelles). During the training the IOTC-OFCF Project and the CNRH put together preliminary estimates of catch and effort for the year 2011, using the data collected through the census (for which the OFCF provided support) and sampling activities (funds from the IOTC) in the Comoros. The IOTC Secretariat updated the estimates in 2013, following further review and validation of the data by the CNRH of Comoros. The catches estimates were input in the IOTC databases and a historical review was also conducted using this data. Activities in Comoros resumed in October 2013, thanks to support from the COI-Smartfish Project and the IOTC, with support discontinued at the end of April 2014. Further in 2014, the World Bank confirmed support to the strengthening of fisheries data collection and management in Comoros. Activities have been initiated and support will extend for a period of 5 years.

**Support to the implementation of pilot sampling in Madagascar:** To date, Madagascar has not implemented regular data collection for its fisheries, in particular those of artisanal nature. For this reason levels of catch of IOTC and main species of sharks by the fisheries in Madagascar are uncertain. Following a request from the Ministry of Fisheries of Madagascar, in 2013 the IOTC Secretariat and the SmartFish Programme conducted a joint mission to Madagascar to identify local Consultants to carry out pilot sampling activities in Madagascar. Following this mission, SmartFish agreed to provide support to data collection and management in Madagascar and selected one of the consultants interviewed to carry out this activity.

The main objective of this activity is to devise a collection and management strategy for fisheries data for coastal fisheries of Madagascar 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.

Pilot sampling activities were implemented in Toamasina and Mahajanga (since October 2013), where catches of tunas were considered important. This activity is ongoing and preliminary results have been reported in several documents and reports.

**Review of Data Collection and Processing Systems for the Longline Fisheries of Indonesia:** Indonesia has over 1,200 longliners fishing in the Indian Ocean and the catches reported in recent years represent a high share of the total catches of longline fisheries in the Indian Ocean. Indonesia’s monitoring of its longline fleets based in ports in Indonesia improved substantially during 2002-2007, thanks to the implementation of a Multilateral Catch Monitoring Programme, which involved the participation of several local and foreign institutions, in particular the IOTC-OFCF Project. Following the end of support, the Directorate General of Capture Fisheries of Indonesia maintained the sampling scheme implemented in 2002. However, since 2009 Indonesia does not report size frequency data and the IOTC Scientific Committee has identified a number of problems with reports of catches of some species from longline fisheries, in particular albacore; and the fact that, to date, Indonesia has not reported catch-and-effort data for its longline fisheries.

For this reason, the IOTC-OFCF Project agreed to support the DGCF of Indonesia in the evaluation of data collection and management activities, including logbook systems, and where required, revision of sampling design and support to strengthening of sampling activities, in particular sampling of the component of the catches unloaded frozen. The objectives of the evaluation were: 1. to carry out fact-finding missions to fishing ports in Indonesia, Indian Ocean side, specifically to Nizam Zachman (Java), Cilacap (Java), Palabuhan Ratu (Java), Benoa (Bali), and Bungus (Sumatra), to assess the situation regarding data collection and reporting systems for longline fisheries, in particular fisheries for

<sup>8</sup> <http://www.thegef.org/gef/ABNJ>

IOTC species, or species of pelagic sharks; 2. to prepare reports on the status of data collection and reporting systems in each port, using the information collected through the above missions; 3. to 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 included, where required: a. documentation of the new sampling protocols and procedures recommended; and b. estimate any additional costs associated to the implementation of the above activities.

The evaluation of data collection and processing systems for longline fisheries took place between 20 November and 20 December 2013 and was carried out by a Consultant with extensive experience on the fisheries of Indonesia, Dr Guillermo Moreno. The results of the evaluation are documented in a report<sup>9</sup>, which was sent to the Directorate General of Capture Fisheries of Indonesia for its consideration. The DGCF was encouraged to consider the recommendations in the Report and make arrangements to address the issues identified as soon as possible.

**Support to Data Collection and Management activities in Sri Lanka:** Sri Lanka has very important fisheries for IOTC species in the Indian Ocean and ranks 4<sup>th</sup> in terms of catches reported to the IOTC. While the Ministry of Fisheries and Aquatic Resources of Sri Lanka has set up sampling in port for its offshore fisheries, the coastal fisheries of Sri Lanka are still not sufficiently covered. In addition, to date Sri Lanka has not reported catch-and-effort and size frequency data as required by the Commission.

In 2012-13, following requests for assistance from the Ministry of Fisheries and Aquatic Resources of Sri Lanka, the IOTC-OFCF Project agreed to provide support to strengthen data collection and processing systems for the coastal and offshore fisheries of Sri Lanka. Activities included: an evaluation of the sampling design; development of a new sampling design; training of enumerators; development of a new database; training of database administrators and data input staff (activity funded by the BOBLME Project); and support to sampling activities (funded by the IOTC-OFCF Project and, subsequently, BOBLME).

The Bay of Bengal Large Marine Ecosystems Project (BOBLME) and the Indian Ocean Tuna Commission (IOTC) maintained support to data management activities during 2014. Mr Nishan Sugathadasa (IT Manager BOBLME) and Mr. Miguel Herrera (Data Coordinator IOTC), visited Sri Lanka during 22-24 January 2014 and included visits to the MFARD, the National Aquatic Resources and Development Agency (NARA), and a field visit to Dickowita Fishery Harbour (near Negombo and the International Airport). The results of the mission are documented in a report<sup>10</sup>, which was sent to the Ministry of Fisheries and Aquatic Resources of Sri Lanka for its consideration. The MFAR was encouraged to consider the recommendations in the Report and make arrangements to address the issues identified as soon as possible.

**Data Mining Neritic Tuna in Malaysia:** Malaysia has important purse seine fisheries for neritic tunas, which operate in its coastal waters. Following recommendations from the IOTC Working Party on Neritic Tunas to improve the quality of catch-and-effort statistics for neritic tunas, and attempt the standardization of the CPUE series available, where appropriate, the IOTC-OFCF Project agreed to provide support for an evaluation of the catch-and-effort data collected in Malaysia, through a mission to Malaysia.

The mission was conducted by Mr. James Geehan (Fisheries Statistician, IOTC) and Mr. Koichi Sakonju (OFCF Fisheries Technical Expert) between 21-23 January 2014, and included visits to the Department of Fisheries (DoF), Putrajaya, the Fisheries Research Institute (FRI) Headquarters, Penang, FRI Capture Fisheries Research Division, Kampung Acheh, and Kuala Perlis landing site.

The results of the evaluation are documented in a report<sup>11</sup>, which was sent to the Directorate of Fisheries and Fisheries Research Institute in Malaysia for its consideration. The DoF was encouraged to consider the recommendations in the Report and make arrangements to address the issues identified as soon as possible. The IOTC-OFCF Project has been following up with both institutions on the issues identified in the report and work is still ongoing.

**Review of data collection and management systems artisanal fisheries of West Sumatra, Indonesia:** Following a request from the Directorate General of Capture Fisheries of Indonesia (DGCF), during 1-5 October 2013 the IOTC-OFCF Project Manager and the IOTC Data Coordinator visited Indonesia in order to discuss support from the Project

<sup>9</sup> G. Moreno (IOTC Secretariat), 2013. Collection of data and processing methodologies for the Indonesian longline fishery in the Indian Ocean region: issues and recommendations. Study commissioned by the Indian Ocean Tuna Commission and the Overseas Fishery Cooperation Foundation of Japan. IOTC Secretariat, December 2013, 47pp.

<sup>10</sup> BOBLME (2014) BOBLME-IOTC joint mission to assess progress concerning support to MFARD data collection and processing systems for IOTC species and sharks 22-24 January 2014, Colombo, Sri Lanka. BOBLME-2014-Project-01.

<sup>11</sup> J. Geehan & K. Sakonju (IOTC-OFCF Project), 2013. Back to Office Report: IOTC-OFCF data mining mission of neritic tuna in Malaysia. IOTC Secretariat, January 2014, 13pp.



to the implementation of capacity building activities to enhance the quality of data collection and reports of catch, effort and size data for gillnet, purse seine, lift net, troll line, and other small-scale fisheries in Indonesia. The species that are the focus of these activities are juvenile specimens of tropical tunas (especially yellowfin tuna and bigeye tuna), and several species of neritic tunas, including longtail tuna, frigate and bullet tunas, and kawakawa, species that are often recorded in Indonesia under the aggregate *Tongkol*, not recorded by species.

Following this mission, the IOTC-OFCF Project agreed to provide technical and financial support to facilitate the organization of Data Collection Workshops in cooperation with the Directorate General of Capture Fisheries, Provincial Authorities, and the Research Centre for Capture Fisheries of Indonesia. The Workshops focus on improving species identification and standardization of data collection protocols in all landing places, with a Workshop organized on each Province (and duration between 3-4 days).

The first Workshop was organized during 18-21 February 2014, in Padang (West Sumatra). Prior to the Workshop, the IOTC-OFCF Project commissioned a survey of the artisanal fisheries in the Province of West Sumatra and arrangements for data collection and data management for those fisheries. This survey was undertaken by a Consultant, Dr Guillermo Moreno, in two phases, before and after the Workshop: 10-15 & 22-27 February 2014. The results of the survey are documented in a report<sup>12</sup>, which was sent to the Directorate General of Capture Fisheries of Indonesia for its consideration. The DGCF was encouraged to consider the recommendations in the Report and make arrangements to address the issues identified as soon as possible.

**Data Collection Workshop West Sumatra:** The Indian Ocean Tuna Fisheries of Indonesia West Sumatra Data Collection Workshop was held in Padang, West Sumatra, from 18 to 21 February 2014. The main objectives of the workshop were: (i) Review of the status of data collection in West Sumatra, in particular the collection of fisheries data from oceanic ports and other important landing places, with a focus on the catches of juvenile tropical tunas and species of neritic tunas; (ii) Review of the quality of the catches of IOTC species and main species of sharks reported by West Sumatra, focusing on tropical and neritic tuna species; (iii) Training on sampling techniques and the identification of tuna and tuna-like species and main species of pelagic sharks by enumerators; (iv) Identification of issues relating to data collection in West Sumatra and the actions required to address those issues; (v) Preparation of a work plan for the implementation of the recommendations from the Workshop and identification of the human and financial resources required to do so.

The Workshop identified various 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 SL-3 Form, in particular overspread 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 series of catch for West Sumatra.

The Workshop identified of 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, in particular: to conduct a review of historical catches for West Sumatra; and to establish a sampling scheme to facilitate the collection of independent samples from the fisheries, as requested by the IOTC. The Workshop noted that the DGCF may require assistance in the implementation of some of the recommendations, 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.

The report of the Workshop<sup>13</sup> was sent to the Directorate General of Capture Fisheries of Indonesia. The DGCF was encouraged to consider the recommendations in the Report and make arrangements to address the issues identified as soon as possible.

**Workshop on Compliance with IOTC Data Requirements:** The Regional Workshop to Support Compliance with IOTC Requirements for the Collection and Reporting of Fisheries Data to the IOTC was held in Flic en Flac, Mauritius, from 18 to 20 March 2014. The workshop was held in response to a request from the IOTC Scientific Committee for the IOTC Secretariat to organize a Workshop to assist IOTC CPCs to understand the IOTC data requirements. The main objective of the workshop was to assess the performance of IOTC CPC's to comply with IOTC Mandatory Statistical Requirements and, where required, identify areas in which IOTC could assist its Members to ensure full compliance with IOTC Requirements for Statistics in the future.

<sup>12</sup> G. Moreno (IOTC Secretariat), 2014. Collection of data and processing methodologies for artisanal fisheries in the Province of West Sumatra, Indonesia: issues and recommendations. Study commissioned by the Indian Ocean Tuna Commission and the Overseas Fishery Cooperation Foundation of Japan. IOTC Secretariat, February 2014, 27pp.

<sup>13</sup> IOTC-OFCF Project Phase IV. Report and documentation of the Indian Ocean Tuna Fisheries of Indonesia West Sumatra Data Collection Workshop: Review of Issues and Considerations. Padang, 18–21 February 2014. IOTC-OFCF Technical Report. No. 3. Padang, IOTC. 2014. 43 pp.

The Regional Workshop was organized by the IOTC Secretariat and co-financed by the Indian Ocean Commission – SmartFish Project, the Bay of Bengal Large Marine Ecosystems Programme (BOBLME), and the IOTC. It was attended by 29 experts, from 13 countries, from a variety of disciplines and backgrounds.

The Workshop identified various issues concerning the status of reporting of fisheries data to the IOTC, in particular: poor levels of reporting of fisheries data for the majority of coastal and industrial fisheries in developing coastal states in the IOTC Area, especially catch-and-effort, size frequency, and discard levels; poor implementation of provisions under the IOTC Regional Observer Scheme, concerning in particular the minimum levels of coverage set by the Commission for coastal and industrial fisheries; and insufficient understanding of the IOTC data requirements and procedures required to prepare the IOTC datasets by most coastal countries.

The Workshop identified a range of actions that could be implemented to address the issues identified, and recommended that the countries concerned address those recommendations as a matter of priority. The Workshop noted that some developing coastal countries may require assistance in the implementation of some of the recommendations, and encouraged the continuation of advice and support from the IOTC Secretariat, the BOBLME Project, and the IOC-SmartFish Project, in the strengthening of levels of reporting for developing coastal states in the Indian Ocean.

The report of the Workshop<sup>14</sup> was disseminated to all participants and published in the IOTC Web Page. The full report is presented as a separate document to the WPDCS (IOTC–2014–WPDCS10–07).

**Review of data collection and management systems artisanal fisheries of Bali and East Java, Indonesia:** This activity preceded the second Data Collection Workshop, which was organized later in the year and is reported later in page 9 of this document. Additional background for this activity is provided on page 7 (West Sumatra Data Workshop).

This survey was undertaken by a Consultant, Dr Guillermo Moreno, between 21-28 May 2014. The results of the survey are documented in a report<sup>15</sup>, which was sent to the Directorate General of Capture Fisheries of Indonesia for its consideration. The DGCF was encouraged to consider the recommendations in the Report and make arrangements to address the issues identified as soon as possible.

**Pilot sampling activities North and West Sumatra (Indonesia):** In recent years Indonesia has ranked first in terms of catch levels of IOTC species and pelagic species of sharks, as identified by the Commission, in the Indian Ocean. Over the period 2008-2012 Indonesia reported over 20% of the catches of IOTC species and sharks in the Indian Ocean, with annual catches near to or over 300,000 metric tons, and catches in North (Sumatera Utara) and West (Sumatera Barat) Sumatra representing over 20% of those catches. West Sumatra and North Sumatra have important coastal fisheries and catches of longliners are recorded in the only fishing port, Bungus (West Sumatra). While the longline component in Bungus seems to be properly monitored by enumerators, monitoring of the coastal fisheries in both provinces is deficient, as there is no actual sampling of catches at the landing place.

Pilot sampling activities in West and North Sumatra were initiated following a request for assistance from the Directorate General of Capture Fisheries of Indonesia. Through its request, the DGCF attempts to address both the recommendations from the Data Collection Workshop West Sumatra (covered in Page 6) and IOTC Data Requirements, in particular sampling of coastal fisheries at levels equal or above those recommended by the IOTC (sampling in port of 5% of the fishing activities of artisanal fleets).

Pilot sampling activities were initiated in June 2014 thanks to the support provided by the Bay of Bengal large Marine Ecosystems Project, the Overseas Fisheries Cooperation Foundation, the IOTC, the DGCF, and the Provincial Authorities of West Sumatra and North Sumatra.

The objectives of the initiative 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) To 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.

<sup>14</sup> IOTC Secretariat. Report and documentation of the Regional Workshop to Support Compliance with IOTC Requirements for the Collection and Reporting of Fisheries Data to the IOTC. Flic en Flac, 18–20 March 2014. IOTC-2014-CODAWS01-R. 40 pp.

<sup>15</sup> G. Moreno (IOTC Secretariat), 2014. Collection of data and processing methodologies for artisanal fisheries in the Provinces of Bali and East Java, Indonesia: issues and recommendations. Study commissioned by the Indian Ocean Tuna Commission and the Overseas Fishery Cooperation Foundation of Japan. IOTC Secretariat, May 2014, 31pp.



The IOTC Secretariat coordinates all activities under the Project. Field activities are run by the DGCF with the assistance of a Consultant. The pilot project is ongoing and support will be discontinued at the end of January 2015. A six month extension of pilot activities is under consideration (BOBLME). More information on this activity will be reported to future meetings of the WPDCS.

**Data Mining Neritic Tuna in Thailand:** Thailand has important purse seine fisheries for neritic tunas, which operate in its coastal waters. Following recommendations from the IOTC Working Party on Neritic Tunas to improve the quality of catch-and-effort statistics for neritic tunas, and attempt the standardization of the CPUE series available, where appropriate, the IOTC-OFCF Project agreed to provide support for an evaluation of the catch-and-effort data collected in Thailand, through a mission to Thailand.

The mission was conducted by Mr. James Geehan (Fisheries Statistician, IOTC Secretariat) and Mr. Koichi Sakonju (IOTC-OFCF Project Manager) between 23-27 June 2014, and included visits to the Department of Fisheries (DoF), Bangkok, the Andaman Sea Fisheries Research and Development Center (AFRDEC), Phuket, and Phuket landing site. A joint meeting was also arranged between the Department of Fisheries and SEAFDEC, Bangkok, to discuss sharing of fisheries data and to identify common areas of work.

The results of the evaluation are documented in a report<sup>16</sup>, which was sent to the Directorate of Fisheries and Andaman Sea Fisheries Research and Development Centre in Thailand for its consideration. The DoF was encouraged to consider the recommendations in the Report and make arrangements to address the issues identified as soon as possible. The IOTC-OFCF Project has been following up with both institutions on the issues identified in the report and work is still ongoing.

**Data Collection Workshop Bali and East Java:** The Indian Ocean Tuna Fisheries of Indonesia Bali and East Java Data Collection Workshop was held in Bali from 27 to 30 October 2014. The main objectives of the workshop were the same as those specified for the West Sumatra Workshop.

The issues identified by the Workshop and actions recommended are also in line with those identified by the Workshop in West Sumatra. The report of the Workshop is in preparation and will be forwarded to the Directorate General of Capture Fisheries of Indonesia for its consideration as soon as it is available.

### Activities planned for 2015 and following years

Below is a non-exhaustive list of the capacity building activities planned for 2015:

- **IOTC Data Support Missions:** Data support missions are intended to: (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 the issues identified in (i), where any; (iii) Agree on a Plan of Action to address the issues identified, including a time frame for the implementation of those actions and the type of indicators to be used in each case to assess progress. The missions will be carried out by staff from the IOTC Secretariat with the assistance of staff from the government institutions concerned in each country. Two missions are planned for 2015, to the Islamic Republic of Iran and India. These missions will be possible thanks to financial support from the European Union (DG Mare), and the IOTC (regular budget, Capacity Building).
- **Support to albacore size frequency sampling in Mauritius:** Port Louis in Mauritius is probably the main landing place for albacore in the Indian Ocean. This is one of the activities proposed for support from the IOTC-OFCF Project in 2015 and is intended 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 main objective of this activity is to provide alternative length frequency data through sampling of lengths of albacore at the landing place. The feasibility and usefulness of sampling will be assessed through a mission of the IOTC-OFCF Project to Mauritius.
- **Data Collection Workshop DKI Java and West Java:** West Java has very important fisheries for IOTC species. This is one of the activities proposed for support from the IOTC-OFCF Project in 2015. Its objectives are the same of previous workshops carried out with the support of the IOTC-OFCF Project.
- **Support to Pilot Sampling Activities in West and North Sumatra:** A request for extension of the sampling in West and North Sumatra, for a period of six months, has been put with the BOBLME. Extension of

<sup>16</sup> J. Geehan & K. Sakonju (IOTC-OFCF Project), 2013. Back to Office Report: IOTC-OFCF data mining mission of neritic tuna in Thailand. IOTC Secretariat, July 2014, 13pp.

activities in Sumatra would allow sampling coverage to extend over an entire year therefore making it possible to use the data collected to correct estimates of catch in West and North Sumatra.

- **Support to data management Indonesia:** For a number of years, Indonesia has collected size frequency data and observer data from its longline fisheries. However, this information has not been reported to the IOTC. In 2013, the DGCF of Indonesia requested assistance from the IOTC Secretariat to facilitate reporting of the information available in the format requested by the IOTC. This is one of the activities proposed for support from the IOTC-OFCF Project in 2015. The IOTC Secretariat will prepare the necessary procedures to facilitate reporting of this information. Following this work, the IOTC-OFCF Project will visit Indonesia to set-up the procedures required and train staff at the DGCF on how to use them.
- **Support to data management Sri Lanka:** Since 2013, the IOTC and BOBLME have provided support to the upgrade of the Access database PELAGOS and training of staff from the Ministry of Fisheries and Aquatic resources and National Aquatic Resources Research and Development Agency of Sri Lanka. This cooperation is ongoing and will continue into 2015 depending on the funds available.
- **Support to the implementation of the IOTC Regional Observer Scheme in Sri Lanka:** Sri Lanka has important gillnet-longline fisheries for tropical tunas, ranking third in terms of total fleet catches from 2010-2012, and has also reported important amounts of shark catches. However, Sri Lanka has not reported catch and effort data consistent with IOTC standards, including separate catch and effort data for gillnet and longline gears and for vessels operating outside the EEZ. In 2014, the Sri Lankan Department of Fisheries and Aquatic Resources made a formal request to the IOTC Secretariat for assistance to support the implementation of a national regional observer scheme. A mission is planned for 2015 to review the experience and data collected by observers in 2014 and to use the findings to identify key data gaps and quality issues in order to improve the process and develop a working protocol, specific to the Sri Lankan fisheries. This will include a presentation of updated training material from the Secretariat, specific to the findings.
- **Support to the implementation of the IOTC Regional Observer Scheme in Iran and Pakistan:** Iran and Pakistan have important gillnet fisheries for neritic tuna fisheries (Iran reported 20% of total neritic tuna catches from 2010-2012) and has a substantial offshore fleet. However, neither have reported catch-and-effort data in recent years or length-frequency data according to IOTC standards and although important amounts of sharks are harvested, these are rarely identified to species level. A mission is planned to conduct a joint observer training workshop in 2015 with the objective of establishing a pilot programme in each country. This will be undertaken in collaboration with WWF as part of the ABNJ initiative.

It is important to note that implementation of the activities listed above is subject to final confirmation of support by the agencies concerned. As for activities under the IOTC-OFCF Project, the IOTC and the OFCF are planning to hold the next IOTC-OFCF Joint Committee Meeting in Seychelles, on 15 December 2015, right after the meeting of the IOTC Scientific Committee. During the meeting the Project will focus on reviewing all activities undertaken during the second year of Phase IV of the Project, and consider activities to be implemented during year 3 of Phase IV of the Project, from April 2015, where agreed by both parties.