

PROGRESS ON THE RECOMMENDATIONS OF WPTT12

PREPARED BY: IOTC SECRETARIAT AND CHAIR, 28 SEPTEMBER 2011

PURPOSE

To provide an update on the progress made in implementing the recommendations from previous Working Party on Tropical Tunas (WPTT) meetings, and to provide alternative recommendations for the consideration and potential endorsement by participants.

BACKGROUND

At the 12th Session of the Working Party on Tropical Tunas, participants agreed on a series of actions to be taken by participants, CPCs, and the Secretariat on a range of issues. The subsequent table developed and agreed to by the WPTT also contained specific responsibilities for those who were expected to undertake the tasks recommended, as well as a series of deadlines.

DISCUSSION

The Rules of Procedure of the Scientific Committee include the following seven core tasks, which are to be supported by the various Working Parties.

- a) recommend policies and procedures for the collection, processing, dissemination and analysis of fishery data;
- b) facilitate the exchange and critical review among scientists of information on research and operation of fisheries of relevance to the Commission;
- c) develop and coordinate cooperative research programmes involving Members of the Commission in support of fisheries management;
- d) assess and report to the Commission on the status of stocks of relevance to the Commission and the likely effects of further fishing and of different fishing patterns and intensities;
- e) formulate and report to the sub-commission, as appropriate, on recommendations concerning conservation, fisheries management and research, including consensus, majority and minority views;
- f) consider any matter referred to by the Commission;
- g) to carry out other technical activities of relevance to the Commission.

Noting the core tasks of the SC, and hence the WPTT, and the fact that the Scientific Committee, Commission and CPCs in general have struggled to implement previous recommendations from the WPTT, the Secretariat and Chair undertook a review and subsequent revision of recommendations from the WPTT12 meeting in an attempt to provide clearer direction and delegation of responsibility for each recommendation.

The revised recommendations are contained in Attachment A for the consideration and potential endorsement by the WPTT.

RECOMMENDATION

That the Working Party on Tropical Tunas:

- 1) **NOTE** the progress made in implementing the recommendations of the 12th Session of the WPTT, and consider the proposed draft revisions to those recommendations yet to be completed.
- 2) **AGREE** to the revised recommendations, and for these to be combined with any new recommendations arising from WPTT13, noting that these will be provided to the Scientific Committee for their endorsement.

ATTACHMENTS

Attachment A: Progress made on the recommendations of WPTT12.

ATTACHMENT A:

PROGRESS MADE ON THE RECOMMENDATIONS OF WPTT12

#	Recommendation	Year Issued	Revise (Y/ N)	Revision of recommendation	Responsibility	Due date
1	<p>Catch-and-Effort data from Coastal Fisheries: Drifting gillnet fisheries of Iran and Pakistan: To date, Iran and Pakistan have not reported catches of bigeye tuna for their gillnet fisheries. Although both countries have reported catches of yellowfin tuna and skipjack tuna, they have not reported catch-and-effort data as per the IOTC standards, in particular for those vessels that operate outside their EEZ.</p> <p><i>Progress: The IOTC Secretariat visited Iran (February 2011) to assess the status of data collection and processing, including strengthening of data management systems and implementation of pilot sampling activities to assess the quality of the statistics collected from gillnet fisheries.</i></p> <p><i>A second mission to Iran was conducted in September 2011, in order to finalize agreement for the implementation of the above activities. Furthermore, Iran has initiated a logbook programme for its gillnet fishery.</i></p>	2008	Y	<p>The WPTT NOTED the IOTC Secretariat's recent activities in Iran, which aimed at finalising agreement for the implementation of systems to strengthen data management and to implement pilot sampling activities to assess the quality of the statistics being collected from gillnet fisheries.</p> <p>Noting that an IOTC mission to Pakistan was scheduled but had to be postponed due to the security situation in the country, the WPTT RECOMMENDED that the IOTC Secretariat travel to Pakistan once the security situation improves, in order to assess the status of data collection and reporting systems in this country and to report back to the WPTT at its 2012 session.</p> <p>The WPTT RECOMMENDED that the IOTC Secretariat assist Iran and Pakistan in the strengthening of data collection and reporting systems, where required, so as to facilitate reporting of statistics for tropical tuna species as per IOTC standards.</p> <p>The WPTT RECOMMENDED that as a matter of priority, Iran and Pakistan provide catch-and-effort data and size data for tropical tunas, in particular from their gillnet fisheries, noting that this is already a mandatory reporting requirement.</p>	Iran and Pakistan	WPTT14: 2012
2	<p>Gillnet/longline fishery of Sri Lanka: Although Sri Lanka has reported catches of bigeye tuna for its gillnet/longline fishery, the catches are considered to be too low. This is probably due to the mislabelling of catches of bigeye tuna as yellowfin tuna. In addition, Sri Lanka has not reported catch-and-effort data as per the IOTC standards, including separate catch-and-effort data for longline and gillnet and catch-and-effort data for those vessels that operate outside its EEZ.</p> <p><i>Progress: the IOTC-OFCF project visited Sri Lanka in August 2011 in order to finalize an Agreement to assist Ministry of Fisheries and Aquatic Resources to build a centralized database system for its fisheries.</i></p>	2010	Y	<p>The WPTT welcomed the efforts of Sri Lanka to improve data collection and management for its fisheries and RECOMMENDED that the IOTC-OFCF project and Sri Lanka continue their cooperation towards improving collection and reporting of fisheries statistics and to report back to the WPTT at its 2012 Session.</p>	Sri Lanka	WPTT14: 2012

	<i>Sri Lanka informed that they are implementing a logbook and a VMS system onboard its vessels. The IOTC Secretariat is currently finalizing an agreement to assist the MFAR and NARA to strengthen Sri Lanka data collection systems.</i>					
3	Pole-and-line fishery of Maldives: Maldives has not reported catch-and-effort data by gear type and geographic area since 2002. <i>Progress: Maldives informed that they cannot provide information as per IOTC standards but that they will be able to do so for data starting in 2010, as they are starting the implementation of a logbook system onboard their fishing vessels.</i>	2010	Y	The WPTT RECOMMENDED that Maldives report catch and effort data as per the IOTC standards for 2010 and that for earlier statistics (2002 to 2009), that they are reported by atoll, month, gear and species, as was done in the past.	Maldives	
4	Coastal fisheries of Comoros, Indonesia, Madagascar, and Yemen: The catches of tropical tunas for these fisheries have been estimated by the Secretariat in recent years. The quality of the estimates is thought to be very poor due to the paucity of the information available about the fisheries operating in these countries. <i>Progress: A frame survey was conducted in Comoros in February/March 2011 and a sampling programme started in Comoros in early 2011. The Secretariat conducted missions in Indonesia and Madagascar to assess the quality of the data collection and reporting systems in the framework of the pilot project set out in Resolution 10/01.</i> <i>Yemen: no progress.</i>	2008	Y	The WPTT RECOMMENDED that the IOTC Secretariat send a mission to Indonesia to assist in the reporting of catch of their coastal fisheries by gear and species and to report progress to the WPTT at its next meeting. The WPTT welcomed the implementation of a new sampling programme in Comoros and RECOMMENDED that Comoros consider maintaining this activity after the end of the programme to be able to report annual data as per IOTC requirements. The WPTT urged Madagascar, Indonesia and Yemen to collect and report statistics on their coastal fisheries and RECOMMENDED that these countries request assistance from the Secretariat where required.	Comoros Madagascar Indonesia Yemen	2012
5	Catch-and-Effort data from Surface and Longline Fisheries: Longline fishery of India: India has reported very incomplete catches and catch-and-effort data for its commercial longline fishery. <i>Progress: no progress</i>	2008	Y	The WPTT RECOMMENDED that as a matter of priority, the IOTC Secretariat liaise with India, Oman, Indonesia, Philippines and Malaysia to implement the minimum requirements of IOTC Resolution 08/04, in order to improve the quality of the data reported from their longline fleets, by species, and to report back to the WPTT at its next meeting.	Secretariat India Oman Philippines Malaysia	2012
6	Longline fisheries of Indonesia and Malaysia: Indonesia and Malaysia have not reported catches for longliners under their flag that are not based in their ports. In addition Indonesia has not reported catch-and-effort data for its longline fishery to date. <i>Progress: no progress</i>	2010	Y	<i>Combined with 5 above.</i>		
7	Industrial tuna purse seine fishery of Iran: Iran has reported very low catches for its industrial tuna purse seine fishery in recent years. This includes low catches of yellowfin tuna and very low or no catches at all of other tropical tunas. The catch rates (around 2000 t by vessel by year) and average number of fishing days operated by vessel (around 80 days by vessel by year) are much lower than those recorded for all other industrial purse seine fleets.	2008	Y	The WPTT RECOMMENDED that the IOTC Secretariat continue working with the Iranian authorities towards improving reporting from their purse seine fleet.	Iran Secretariat	

	<i>Progress: Iran informed the IOTC Secretariat that its purse-seine fleet had little activity in recent years</i>					
8	Industrial tuna purse seine fishery of Thailand: the proportion of bigeye and yellowfin in the Thai purse seine fishery is very different from the species composition on the other purse seine fisheries operating in the same area, and this could be a consequence of the sampling system. <i>Progress: no progress, however Thailand informed that there is no more purse-seine vessel flagged in Thailand</i>	2008	Y	The WPTT RECOMMENDED that Thailand and the EU work together to compare their catch and effort data, and their sampling systems, in order to determine the reasons for differences in species composition identified for past catches from their purse seine fleets, and to report findings to the next WPTT meeting.	Thailand EU	
9	Longline fishery of Philippines: Philippines has reported very low catches of tropical tunas for its longline fishery, in particular catches of bigeye tuna. The amounts of frozen bigeye tuna products exported from Philippines vessels to other countries (IOTC Bigeye tuna Statistical Document Programme) have been consistently higher than the amounts reported by Philippines as total catch for this species. <i>Progress: no progress</i>	2010	Y	The WPTT RECOMMENDED that Philippines investigate the reasons for the differences between bigeye export data and reported catch data from their longline fishery, and to report findings to the next WPTT meeting.	Philippines	
10	Discard levels for all fisheries: The total amount of tropical tunas discarded at sea remains unknown for most fisheries and time periods. The EU presented estimations of bycatch and discard levels on its purse-seine fleets, however, due to the anti-piracy activities on board the fleet, no observer could be deployed in 2009 in order to refine those estimates. <i>Progress: only one trip report from China was send to the Secretariat</i>	2009	Y	Noting that IOTC Resolution 11/04 <i>on the Regional Observer Scheme</i> requires 5% observer coverage on vessels more than 24 m and less than 24 m if fishing outside their EEZ, and that CPCs shall send within 150 days at the latest each report from an observer placed on a vessel to the Executive Secretary, and that to date only one report has been provided, the WPTT RECOMMENDED that all CPCs provide the overdue observer reports to the Secretariat immediately.	All CPCs	
11	Size data from All Fisheries: Gillnet fisheries of Iran and Pakistan: Pakistan has not reported size frequency data for its gillnet fishery to date. Iran has not reported size frequency data by month and geographic area. <i>Progress: no progress</i>	2008	Y	The WPTT RECOMMENDED that Iran and Pakistan to report size data for tropical tuna species for its gillnet fleets, noting that this is already a mandatory reporting requirement, and that the Secretariat assist Iran and Pakistan to facilitate reporting of this information where required.	Iran Pakistan	
12	Gillnet/longline fishery of Sri Lanka: Although Sri Lanka has reported length frequency data for tropical tunas in recent years, sampling coverage is thought to be too low and lengths are not available by gear type or fishing area. <i>Progress: see 2 above.</i>	2010	Y	<i>Combined with 2 above.</i>		
13	Longline fisheries of India, Malaysia, Oman and Philippines: To date, these countries have not reported size frequency data for their longline fisheries. <i>Progress: no progress</i>	2008	Y	The WPTT RECOMMENDED that India, Malaysia, Oman and Philippines make every possible effort to collect and report size data for tropical tuna species for their longline fleets, noting that this is already a mandatory reporting requirement.	India Malaysia Oman Philippines	
14	Longline fishery of Indonesia: Indonesia has reported size frequency data for its fresh-tuna longline fishery in recent years. However, the samples cannot be fully broken by month and fishing area (5x5 grid)	2010	Y	The WPTT RECOMMENDED that Indonesia report size data for tropical tuna species for its longline fleets as soon as possible as per IOTC standards, noting that this is already a	Indonesia	

	and they refer exclusively to longliners based in Indonesia. <i>Progress: no progress</i>			mandatory reporting requirement.		
15	Fresh-tuna longline fishery of Taiwan,China: To date, Taiwan,China has not provided size frequency data for its fresh-tuna longline fishery. <i>Progress: Completed. Taiwan reported SF data for its longline fleet for 2010</i>	2010	N	–	–	–
16	Longline fishery of Japan: Japan has not reported samples for its commercial fishery since 2000 and the number of samples reported from training vessels has dropped dramatically since that time. <i>Progress: Japan informed that it is making effort to increase sampling coverage through their observer programme however the number of samples are still too low.</i>	2008	Y	The WPTT RECOMMENDED that the IOTC Secretariat assess levels of reporting for Japan upon receiving size data for 2010 and report back to the WPTT at its next meeting. The WPTT RECOMMENDED that Japan increase sampling coverage to attain at least the minimum required by the IOTC Resolution 10/02 on mandatory statistical requirements (1 fish by metric ton of catch by type of gear and species).	Japan Secretariat	
17	Coastal fisheries of Comoros, India, Indonesia and Yemen: To date, these countries have not reported size frequency data for their coastal fisheries. <i>Progress: see 4 above.</i>	2008	Y	<i>Combined with 4 above.</i>	–	–
18	Pole-and-line fishery of Maldives: Maldives has not provided size data by month, geographic area and gear type since 1998. The size data available is highly aggregated and not by IOTC standards. It is important to note that Maldives is currently revising its size frequency statistics database and will be providing this dataset soon. <i>Progress: no progress update received by the Secretariat. Awaiting revised dataset from the Maldives.</i>	2010	N	–	–	–
19	Industrial purse seine fisheries of Thailand and Iran: To date, Thailand and Iran have not provided individual lengths of tropical tunas by month and 5 degrees square grid for their industrial purse seine fisheries. <i>Progress: see 7 above.</i>	2010	Y	<i>Combined with 7 above.</i>	–	–
20	Biological data for all tropical tuna species: Surface and longline fisheries, in particular Taiwan,China, Indonesia, Japan, EU and China: The Secretariat had to use length-age keys, length-weight keys, and processed weight-live weight keys for tropical tuna species from other oceans due to the general paucity of biological data available from the Indian Ocean. <i>Progress: no progress.</i>	2008	Y	The WPTT RECOMMENDED that biological data is gathered and reported to the IOTC Secretariat in order to develop specific length-age, length-weight and processed weight-live keys for the Indian Ocean tropical tuna species, in particular by the main longline fisheries (Taiwan,China, Indonesia, Japan, EU and China).	All CPCs	WPTT14, 2012
21	The WPTT noted that some of the issues identified in <u>Table 1</u> have been outstanding for several years urging the countries concerned to consider addressing such issues as soon as possible. In this regard, the WPTT requested the countries concerned to report to the next meeting of the WPTT about the actions undertaken and progress	2010	N	<i>Combined with other recommendations throughout this table.</i>	–	–

	achieved in addressing these issues. In addition, the WPTT requested the IOTC Secretariat to follow-up on these issues, assisting the countries concerned where required. <i>Progress: no progress. Incorporated into individual recommendations in this table.</i>					
22	The WPTT recommended that complete and good quality data should be reported to the Secretariat as per IOTC requirements for all the fisheries, and that this issue is brought to the attention of the Scientific Committee with a view of reporting to the Compliance Committee. <i>Progress: Complete. This information was presented to the Compliance Committee at its 8th Session in 2011.</i>	2010	N	–	–	–
23	The WPTT recommended that the Secretariat maintains its support to developing countries in the IOTC region regarding data collection and processing, through the IOTC-OFCF Project or other initiatives. <i>Progress: IOTC-OFCF activities continued in 2011 (Comoros, Sri Lanka, Iran). IOTC has supported Comoros in the implementation of a sampling programme and, as per Resolution 10/01, a pilot project has been implemented by IOTC on the evaluation of data collection and reporting systems in Indian Ocean coastal states.</i>	2010	N	–	–	–
24	The WPTT acknowledged the important information provided in relation to Iran's yellowfin fisheries as well as yellowfin biology and ecology in that area. The WPTT further noted that, to date, the IOTC has not received information concerning the fishery information from Iran and, thus, the WPTT recommended that effort are carried out to collect and report to IOTC the necessary information on Iran's fishery statistics. <i>Progress: incomplete catch and effort and size data has been reported to the Secretariat and the IOTC-OFCF is working with Iran for the strengthening of their data management system.</i>	2010	Y	<i>Combined with 1 and 7 above.</i>	–	–
25	Madagascar: The WPTT noted that the purse-seine fleet is still unloading significant amount of fish in Antsiranana port, however, it noted that data on artisanal catches are still missing from the database hosted at the Secretariat. It encouraged that a statistical system is developed and implemented in order to report on those catches, which are being estimated by the Secretariat at the moment. <i>Progress: no progress</i>	2010	Y	<i>Combined with 4 above.</i>	–	–
26	As the catch statistics provided by Sri Lanka to the IOTC Secretariat do not contain estimates of bigeye catches, the WPTT recommended	2010	N	–	–	–

	that the species composition obtained in this study is provided to IOTC Secretariat in order to improve Sri Lanka catch statistics in IOTC. <i>Progress: Sri Lanka informed that they are currently looking into this matter and will report results to the Secretariat ASAP.</i>					
27	The WPTT acknowledged that biology of the fish in the area is unknown and noted that fisheries data for the region is very scarce. It recommended that detailed fisheries data and statistics are reported to the Secretariat for the region. <i>Progress: Mandatory as part of Resolution 10/02.</i>	2009	N	—	—	—
28	The amount of data generated during the tagging programme is being used in multiple ways by scientists and is bringing to the table a considerable amount of new information on this species in the Indian Ocean. The WPTT encouraged further analysis to be conducted on the tagging data. <i>Progress: Additional analysis is scheduled to be undertaken in preparation for the Tagging Symposium.</i>	2010	N	—	—	—
29	Various studies undertaken for the 10th Session of the WPTT demonstrated that growth is following a multi stanza pattern. Since that study, more recapture of large fish have been reported, and the analysis should be updated in order for the various models to estimate a reliable L_{inf} . However, the WPTT recognized that a lot of information is being missed due to the lack of reporting by the longline fisheries of the Indian Ocean which could provide valuable returns of large tagged fish. <i>Progress: In 2011, the Commission recognized the added value of the Indian Ocean Tuna Tagging Programme, and expressed its satisfaction that the data were used for both the assessment of yellowfin tuna and bigeye tuna in 2010. However, the Commission expressed its concern regarding the low reporting rate of the tags by the longline and pole-and-line fleets.</i>	2010	N	—	—	—
30	Various studies undertaken for the 10th Session of the WPTT demonstrated that [BET] growth is not following a Von Bertalanffy curve but a multi-stanza pattern, but the lack of recoveries of large fish did not allow the various models used to reliably estimate the asymptotic length, L_{inf} , at that time. New analyses have been conducted and preliminary results were presented during this session of the WPTT, which recommended that they are pursued further, as they include new recoveries of large fish.	2010	N	—	—	—

	<i>Progress: Paper will be presented to the WPTT13</i>					
31	Various studies undertaken for the 10th Session of the WPTT demonstrated that [SKJ] growth is following a Von Bertalanffy curve, however these analysis should be refined as since then, numerous new recaptures have been reported. <i>Progress: Paper will be presented to the WPTT13</i>	2010	N	—	—	—
32	The WPTT noted that the proportion of bigeye and yellowfin in the catch from the Thai purse seiners is very different from the proportion of bigeye and yellowfin in the European and Seychelles purse seine fleets which are operating in the same area. In fact, there is far more bigeye in the Thai catch. The WPTT recommended to investigate this issue, as this could come from a problem in the sampling. <i>Progress: no progress (see 7 above).</i>	2009	Y	<i>Combined with 7 above.</i>	—	—
33	The WPTT recommended that more work is carried out on catchability and selectivity of longliners and purse-seiners integrating the environmental factors described in this study. It was also noted that these data should be analysed at different scale in order to identify “hot spots”. <i>Progress: Paper will be presented to the WPTT13</i>	2010	N	—	—	—
34	The WPTT recommended the use of Brownie and Petersen models to derive more consistent natural mortality rates based on the latest RTTP-IO data. <i>Progress: Paper will be presented to the WPTT13</i>	2010	N	—	—	—
35	The WPTT recommended that further exploration of this analysis is conducted, especially on the reasons for the estimates of F at age obtained. Explorations of alternative estimators using the same data should also be attempted in order to understand how much of results observed are driven by the data and how much is dependent on the assumptions of the model being violated. The WPTT also encouraged the development of a multiyear Brownie-Petersen estimator to directly estimate M for next year meeting. <i>Progress: Paper will be presented to the WPTT13</i>	2010	N	—	—	—
36	The assessment using MFCF is still a work in progress, and would need to be pursued and refined at the next Session of the WPTT. In the meantime, the WPTT recommended to explore the possibility of developing a Kobe II Strategy Matrix for MFCL which could be presented at the next Session of the Scientific Committee.	2010	N	—	—	—

	<i>Progress: Paper will be presented to the WPTT13</i>					
37	The MFCL and SS3 integrated models enabled scientists to use the fisheries and tagging data, as well as other information for and the WPTT recommended their use in the future. <i>Progress: MFCL has been used for YFT since 2008. SS3 was also used for BET and YFT.</i>	2010	N	—	—	—
38	The group acknowledged that in the current WPTT session several different models were presented, which allowed the contrasting of model results and the simulation of different dynamics and hypothesis. To this end, the WPTT suggested that a range of stock assessments approaches continues to be conducted, integrated or not, in the future. <i>Progress: Several stock assessment models have been used for YFT and BET at the last sessions of the WPTT</i>	2009	N	—	—	—
39	The group recommended that the efforts put in the development of this [bigeye] assessment using SS3 and including the tag data are continued, and refined at the next Session of the WPTT. <i>Progress: Nil.</i>	2010	N	—	—	—
40	The use of a FAD-deployment database available in the Maldives was encouraged in future approaches to improve the time series of CPUE by including the number of FADs in the catch rates standardization process (paragraph 200). Acknowledging the usefulness of standardizing CPUE for skipjack, the WPTT recommended that the work is pursued and that progress are presented at the next Session. <i>Progress: Paper will be presented to the WPTT13</i>	2010	N	—	—	—
41	It was noted that skipjack assessment are difficult to conduct in all RFMOs, however the group recommended that a stock assessment is conducted next year, and that a range of models as well as of fisheries indicators should be used to give a comprehensive picture of the current stock status. <i>Progress: Paper will be presented to the WPTT13</i>	2010	N	—	—	—
42	The WPTT considered that MSE and similar procedures are of great interest for IOTC and encouraged researchers to work on this issue over the coming year. <i>Progress: a Session of the WPM focussing on MSE will take place in October 2011.</i>	2010	N	—	—	—
43	The participation of Dr Adam Langley, as a consultant with	2010	Y	The WPTT thanked Dr. Adam Langley (consultant) for his	—	—

	expertise on integrated stock assessment models, was also welcomed, and the WPTT recommended that his engagement be renewed for the coming year. <i>Progress: Dr. Adam Langley was contracted to undertake a new YFT assessment for WPTT13</i>			contributions and expertise on integrated stock assessment models, and RECOMMENDED that his engagement be renewed for the coming year.		
44	The WPTT acknowledged the importance and implications on the assessment of yellowfin tuna of the results [sex ratio by length] discussed in this paper and, thus, the WPTT recommended that effort are directed to measure the sex and length for any large tagged recovered fish. <i>Progress: 82 and 22 tagged fish collected and sexed respectively from French and Spanish purse-seine fleets.</i>	2010	N	–	–	–
45	The WPTT acknowledged the importance of biological information to be considered in the assessment models. With respect to future work in this area, the WPTT recommended that the gonad collection and calculation of the gonadosomatic index for yellowfin continue. <i>Progress: no progress reported to the Secretariat</i>	2010	Y	Noting the importance of biological information to be considered in the stock assessment models, the WPTT RECOMMENDED that gonad collection and calculation of the gonadosomatic index for yellowfin tuna be carried out prior to the next WPTT meeting.	All	WPTT14, 2012
46	The low rate of recovery from the longline fleets, able to capture larger fish, was noted as limiting the use of the tagging data to inform on some of growth parameters for yellowfin and bigeye. The asymptotic length of fish, L_{inf} , can only be reliably estimated if a sufficient number of fish are tagged and recovered that have grown to very large sizes. The WPTT encouraged scientists involved with those fleets to step up their efforts to aid at the recovery of tagged fish caught by those gears. <i>Progress: Additional analysis is scheduled to be undertaken in preparation for the Tagging Symposium.</i>	2008	N	–	–	–
47	The WPTT recommended that catches of yellowfin tuna in the Indian Ocean should not increase beyond 300,000 t in order to bring the stock to biomass levels that could sustain catches at the MSY level in the long term. If recruitment continues to be lower than average, catches below MSY would be needed to maintain stock levels. Under the light of this the WPTT recommended that bigeye catches are kept at or lower than the 2009 level. <i>Progress: n/a</i>	2010	N	–	–	–
48	The WPTT recommended that French scientists investigate further these changes in activity, possibly by means of VMS data. The WPTT noted that there were also some significant effects on the Spanish and Seychelles purse-seine fleet affecting their fishing	2010	N	–	–	–

	strategy, and that this should be investigated as well. <i>Progress: Paper will be presented to the WPTT13</i>					
49	An on-going analysis on the effects of the piracy activities on catch rates of purse seine fleets was mentioned to the WPTT. The authors were encouraged to present their findings at the next meeting of the Scientific Committee. <i>Progress: A document on the effect of piracy was presented at the 13th Session of the Scientific Committee highlighting that the increase of FAD fishing due to the piracy activities had resulted in high catches of juvenile bigeye. The SC recommended that to keep track of these changes of fishing patterns in order to integrate them into future stock assessments</i>	2010	N	–	–	–
50	The WPTT acknowledged with satisfaction the participation of several scientists from the IOTC developing Members, i.e. China, Comoros, Iran, India, Kenya, Indonesia, Madagascar, Sri-Lanka, Thailand and Cooperating non-Contracting Parties, i.e. Maldives. It was noted that this was made possible by the Meeting Participation Fund decided by the Commission at its 14th Session in 2010 (Resolution 10/05). The WPTT firmly welcomed this initiative as this has significantly increased the number of countries present at WPTT meetings. The WPTT encouraged the Scientific Committee to inquiry the Commission on possible avenues to maintain this fund. <i>Progress: The Commission, at its 15th meeting in April 2010, agreed to replenish the meeting participation fund to its original level of \$200,000USD for 2011.</i>	2010	Y	The WPTT NOTED the increased attendance by scientists from developing CPCs in 2010 and 2011 was partly due to the IOTC Meeting Participation Fund, adopted by the Commission in 2010 (Resolution 10/05 on the establishment of a Meeting Participation Fund for developing IOTC Members and non-Contracting Cooperating Parties), and RECOMMENDED that this fund be maintained.	Scientific Committee	–