



CCSBT-EC/0410/15

12. Indonesian Catch Monitoring

Purpose

To discuss CCSBT involvement in future monitoring of the SBT catch by Indonesia.

Background

Monitoring of the SBT catch in Indonesia has been supported by Japan through funding support for the IOTC and by Australia through the provision of research funding to the CSIRO.

This support has evolved into a collaborative project with Indonesia, which has established an integrated tuna and billfish monitoring program at three ports - Bena, Jakarta and Cilacap. SBT are landed at the port at Bena, which services the longline fleet fishing in the SBT spawning ground. The IOTC is now the lead collaborator.

The broad structure of the monitoring program is:

- a group of enumerators at the three ports with responsibility for collecting data on landings
- data entry activities at Indonesian official institutions
- data analysis by the IOTC
- collection of otoliths and direct ageing

The program has been supported through:

- financing the group of enumerators and supervisors (IOTC support is directed to Jakarta and Cilacap with Australian support directed to Bena)
- purchase of computing equipment
- training of Indonesian officials in data entry
- on-going support of the monitoring system

The annual support for the program from Japanese and Australian sources is around \$180,000-200,000.

Australian Government funding for the program will cease at the end of August 2004.

The IOTC has advised the Secretariat that its development and support program provides funding only up to the middle of 2005.

A workshop was held in April 2003 to consider Indonesian catch monitoring. The workshop observed:-

“that the information being generated by the IOTC monitoring program is critical for estimation of SBT catch, both on the spawning ground and globally, and that the information on age distribution of the spawning stock is used as one of the stock indicators within the CCSBT assessment process. Every effort should be made to continue this program, and to maintain the planned coverage level of 30% of landings. Efforts to improve the WASKI direct landings records to document all tuna landings by species were also strongly encouraged”

These sentiments were supported at the 8th Scientific Committee meeting.

CCSBT10 acknowledged the high importance of the monitoring program to the Extended Commission’s conservation and management objectives and listed Indonesian catch monitoring for discussion at CCSBT11.

Indonesian catch monitoring was considered at the Scientific Committee meeting in September 2004. The Scientific Committee concluded that the continuation of monitoring activities in Indonesia is an essential element of CCSBT SRP catch characterisation.

The Scientific Committee identified the following difficulties if Indonesian catch monitoring was to cease:-

“As the vast majority (>95%) of catch taken by CCSBT members is of sub adult fish, the CCSBT would have no reliable information on the size and age composition of the SBT spawning stock with which to gauge the impact of current and future management measures on the spawning stock composition;

“There would be limited or no information on removals from the spawning stock by the Indonesian fishery. Catch levels in this fishery over the last ten years have been between 300-2500 t. At the estimated current spawning stock biomass this level of fluctuation in removals has the potential to appreciably affect the accuracy of stock assessments;

“The CCSBT would have limited ability to validate the catch by Indonesia against any quota agreed as a national allocation;

“Lack of monitoring would prevent assessment of changes in operations of the Indonesian fleet and foreign fleets operating under the Indonesian flag;

“Lack of information on age structure of the SBT catch as a direct input into the stock assessment would induce increase uncertainty in estimated recent changes in the spawning stock and predictions about impact of future catches;

“Lack of data for estimating the age at maturity and relative spawning potential and possible changes in these over time;

”A break in the continuity of size/age monitoring would significantly compromise the tracking of cohorts recently recruited into the spawning stock, cohorts that will

likely be the principal source of recruits into the future (representation of the 70's and 80's cohorts is very low); and

"Termination of this program would result in loss of accumulated experience and infrastructure in Indonesia necessary for collecting this information."

Discussion

There are a number of issues for consideration by the Extended Commission:

- the importance of accurate information on the Indonesian catch of SBT
- the willingness of individual members to continue to support monitoring of wider benefit to all members
- the prognosis for continued commitment/support for monitoring if current assistance ceases
- cost implications

Importance of Information

Indonesia is fishing in the only known spawning ground for SBT when the estimated spawning biomass is at an historically low level. Changes are occurring in the age structure of the fishery and there is evidence of low recruitment, possibly for the last three years. In this context the Scientific Committee allocates a very high priority to a continuation of catch monitoring.

Continuation of Current Support

Australia has been supporting the catch monitoring program in Benoa through research funding since 1992. Funding support expired at the end of August 2004. Australia's support has also been directed at other tuna species although the main focus has been at Benoa where most of the Indonesian SBT is landed. Outlays between 1 January 2002 and 31 August will total about \$360,000.

Japan has been funding the IOTC to support data collection in developing countries for all species of interest to the IOTC. About \$50,000 per annum is spent in Indonesia. Japan's funding has included computing set up expenses; recurrent support for enumerators and supervision; and funding for IOTC oversight of the project. A data specialist in the IOTC Secretariat is also supported by Japan.

At CCBT10, Australia and Japan noted that it was appropriate that other members now contributed to the funding of the monitoring program. Japan and Australia advised that they would continue funding in 2004 subject to consideration of funding by the Extended Commission in subsequent years at CCSBT11.

Prognosis if Support is Withdrawn

If support were to be withdrawn, the Extended Commission would become reliant on Indonesia to continue the program in terms of commitment, on-going management and funding. To date, the program has required a fairly high level of support from the IOTC and the Australian research program to maintain its operational effectiveness.

Discussions are planned for the end of 2004 between Indonesian officials, IOTC and CSIRO to address the issue of handing over responsibility for the monitoring program to Indonesia. At this stage it is not clear what Indonesia's position will be.

The Scientific Committee expressed some concern that Indonesia would be able to continue to maintain catch monitoring if not supported.

In considering this issue, the Extended Commission might calibrate its judgement against the current difficulties being experienced with Indonesia's commitment to apply for admission as a cooperating non-member.

Costing

The current IOTC coordinated program supports catch monitoring of all species of interest to the IOTC and financial support is being directed to the ports of Cilicap and Jakarta where few SBT are landed. Outlays are around \$70,000 per annum plus support services from the IOTC Secretariat.

The Extended Commission's specific interest is in the SBT related monitoring activity in Benoa. The total annual cost for the Benoa component of the collaborative monitoring program financed from Australian sources is about \$155,000 per annum comprising:-

- Direct expenditure on monitoring	\$70,000
- Ageing of otoliths	\$15,000
- Support expenses	\$70,000

Members will need to consider the costing issue in the context of the roles of the IOTC and the CCSBT and the concerns identified by the Scientific Committee.

If members wish to ensure the viability of catch monitoring the minimum cost to preserve the specific identified interests of the CCSBT would be \$100,000. This would involve continued support for the enumerators at Benoa; retention of the arrangements for the collection and reading of otoliths; and management of the program by the CCSBT Secretariat.

The Secretariat is unable to provide guidance on the cost of supporting a monitoring program at all ports using the IOTC.

For consideration

Prepared by the Secretariat